HISTORY OF ART

SALVAT
Editores
S. A

HISTORY OF ART

BY

JOSEPH PIJOAN

PROFESSOR AT POMONA COLLEGE, CALIFORNIA;
OF THE KAISERL. DEUTSCHES ARCHÄOLOGISCHES INSTITUT
OF THE INSTITUT D'ESTUDIS CATALANS; OF THE ROYAL CANADIAN INSTITUTE;
AND OF THE HISPANIC SOCIETY OF AMERICA

FOREWORD BY

ROBERT B. HARSHE

DIRECTOR OF THE ART INSTITUTE OF CHICAGO

TRANSLATED BY

RALPH L. ROYS

RESEARCH ASSOCIATE OF TULANE UNIVERSITY

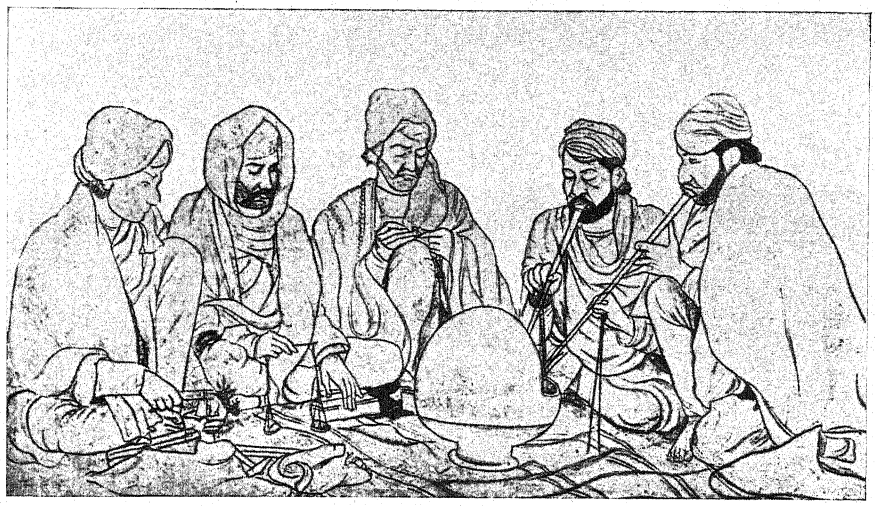
VOLUME ONE

BARCELONA

SALVAT EDITORES, S.A.

1927

PRINTED IN SPAIN
by SALVAT EDITORES, S. A.
41-49, Mallorca Street, Barcelona.
All rights reserved



Hindu goldsmiths at work. Indian Miniature. *(Museum of Lahore.)*

FOREWORD

IN my youth I was taught, with grave finality, these irrefutable facts: the greatest painting in the world was the Sistine Madonna, the greatest piece of sculpture, the Medician Venus. Art, indeed, was dogmatically confined to painting and sculpture, and painting meant the painting of the Italian Renaissance, and sculpture meant Greek work of the Periclean Age or Roman copies of Greek work. There was no conception, amongst laymen at least, of the relative importance of Chinese and Egyptian sculpture, of Persian Miniatures, of primitive and savage art. Even today the art content of—let us say—Mayan Sculpture, of Sung Painting, of the bronzes of Benin and the masks and carvings of the South Seas is unrealized and unsuspected by the average man of fair education and intelligence. He believes these artifacts to be primarily of interest to the ethnologist or historian. They seem to him to be a matter for the museum of science. For these general misconceptions the popular histories of the fine arts with their professorial and archaeological trends, are, in large degree, responsible.

When the three volume work, HISTORIA DEL ARTE by Professor Pijoan appeared, it was, although printed in Spanish, most cordially re-

ceived both in Europe and in America. Students of art had long been waiting for a work both authoritative and catholic in which the subject matter would be given without bias and without verbosity. A general history of art had at last been published which recognized that the field of art was not limited merely to a record of accepted master-pieces of painting and architecture and sculpture, but which gave due place to the so-called minor arts of the great periods and which recognized that art was common to all peoples and to all times.

The translation of professor Pijoan's monumental work into English will be of great significance to thousands of students of art to whom it is for the first time available.

ROBERT B. HARSHE

Bronze from Benin. *(British Museum.)*

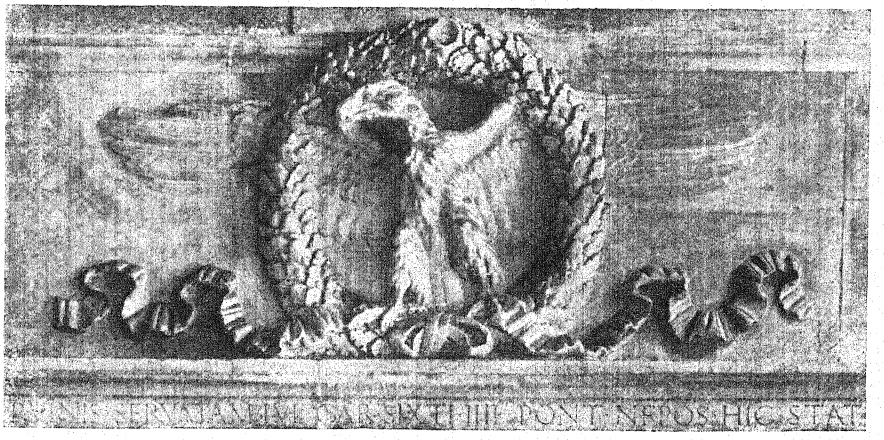


Fig. 1. — Roman eagle from the Trajan's Forum, actually in the church of the *Sancti Apostoli*. ROME.

PREFACE

WHILE the study of history has always been a part of general education, it is only in recent years that a knowledge of art has come to be recognized as an integral part of the spiritual equipment of every cultured man.

Political history, however, is but a single phase of human development; it is in its art that a civilization finds its fullest expression. The best possible approach to the history of art is actually to see the works themselves, and America is rapidly becoming the proud possessor of great collections of master-pieces.

Never since Rome sacked Greece and the Orient for their treasures has there been such a wholesale transfer of great works of art from one part of the world to another as at the present time. It is but natural that with these acquisitions has come the impetus to prepare the public to appreciate them in their new home. We find, however, a dearth of handbooks adequate to the present situation. Most of the public libraries are stocked with the standard works compiled by German scholars of fifty years ago. More recently books of both technical and philosophical merit

*

have appeared, but these presuppose a considerable familiarity with the subject. The need for an amply illustrated manual covering the entire range of the subject has been widely voiced, and the present work is an attempt to satisfy this demand.

The very aim of the work, being to cover the entire history of art, creates its own limitations. Every specialist will discover deficiencies in his own field. The student of modern art will consider that too little attention has been paid to the efforts of the Twentieth Century artists, while those especially interested in decorative art will note that little mention has been made of furniture. The Orientalist will certainly criticize us for allowing but a single chapter for the art of the Far-East, when an entire volume is devoted to that of mediaeval Europe. There is not the space, nor has the writer wished to confuse the reader with the less accentuated works of those artists who have bridged the gaps between the different periods. Some of them have produced things which are of high artistic value, it is true, but we can hardly say that the general trend of art would have been very different had they never existed. On the other hand, certain schools of less artistic merit have had for a time an enormous influence. Decadent they may have been, but they led to a breaking away from the past and prepared the ground for future achievements of the utmost importance.

In the first volume the writer has encountered those difficulties experienced by everyone who has dealt with ancient times, either in the Orient or in classical lands. Chief among these is the spelling of proper names. The lack of uniformity among scholars in this respect has led to the adoption of the method followed by the Encyclopedia Britannica so far as possible, although even here the various contributors have not always followed the same rules in their spelling. Still more open to discussion, perhaps, is the time-honored custom followed in this work of giving Latin names to the Greek gods. Some of our more exacting readers, no doubt, will protest at finding Olympian Zeus turned into Jupiter and Hera of Argos reappearing in the guise of the Capitoline Juno. We are well aware that in the beginning Hermes was not Mercury, and Minerva of Falerii in Latium was a different goddess from Pallas Athene of the Acropolis. Nevertheless, the Greek names were employed only in the native homes of these deities, while to the Roman world, to say nothing of the men of the Renaissance, they were known only by their Latin names. For the sake of consistency it has been thought desirable to call these deities everywhere by the same names, and it seemed hardly practicable to give Greek names to the Roman sculptures and those of the Renaissance. This work is intended for

the general public, and to many to whom Artemis means little, Diana of Ephesus is something very tangible, even though they know her only through the Acts of the Apostles.

In conclusion the writer desires to express his appreciation to Mr. Ralph L. Roys for his kind assistance in the preparation of the English edition and the careful manner in which he has interpreted not only the words but also the spirit of the author. It is our hope that a work of this sort may be a key to those treasures which grow in value as we come to know them better and which are not only a record of the past but also the promise of future achievement.

JOSEPH PIJOAN
Pomona College, California, 1926.

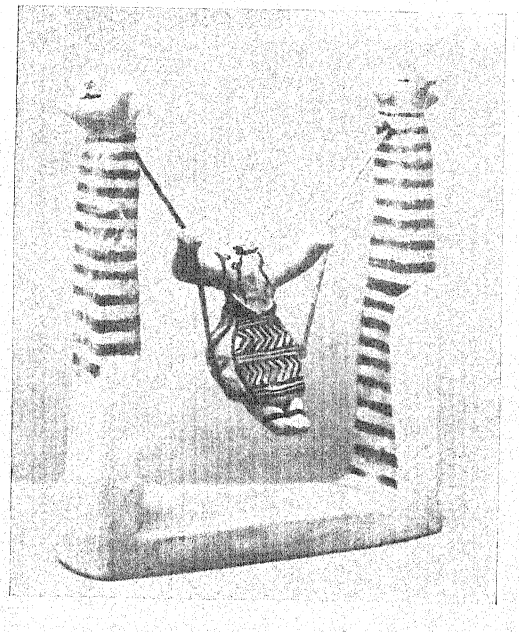
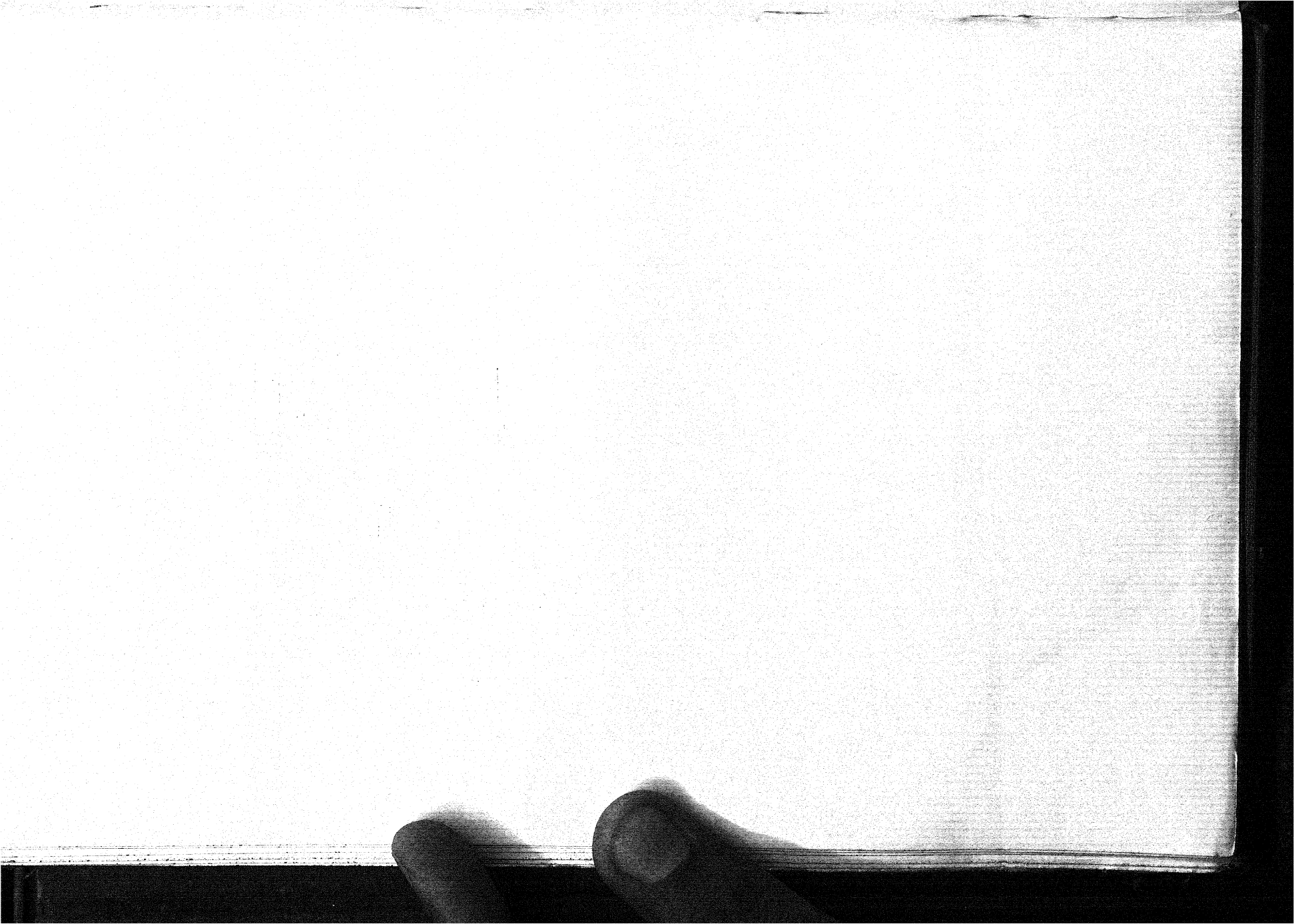


Fig. 2. — Pre-Hellenic girl on the swing. XVth Century B.C. Crete.
(Museum of New York.)



CONTENTS OF VOLUME I

PREFACE. I

CHAPTER I

MODERN PRIMITIVE ART. I

CHAPTER II

ART IN THE REINDEER EPOCH. — NEOLITHIC ART. 17

CHAPTER III

PREDYNASTIC EGYPT. — THE ART OF THE FIRST DYNASTIES. 37

CHAPTER IV

THE ART OF THE THEBAN DYNASTIES. — THE GREAT TEMPLES. — SCULPTURE AND PAINTING. 55

CHAPTER V

THE TEMPLES OF NUBIA. — SAITE ART. — THE MINOR ARTS IN EGYPT . . 77

CHAPTER VI

THE ORIGINS OF ASSYRIOLOGY. — BABYLONIAN ART. — BABYLONIAN ARCHITECTURE 93

CHAPTER VII

THE ORIGIN OF ASSYRIA. — THE PALACES OF NINEVEH. — SCULPTURE AND THE INDUSTRIAL ARTS. 109

CHAPTER VIII

THE ART OF ANCIENT PERSIA. — THE CAPITALS OF THE EMPIRE. — THE PALACES AT PERSEPOLIS. — ROYAL TOMBS. — SCULPTURE AND CERAMICS. . 125

CHAPTER IX

THE SPREAD OF ORIENTAL ART. — THE HITTITES. — PHOENICIA AND CYPRUS. — PALESTINE. — THE MEDITERRANEAN COLONIES OF THE NATIONS OF WESTERN ASIA. — IBERIAN ART. 139

CHAPTER X

THE ART OF THE FAR-EAST AND ITS RELATION TO OCCIDENTAL ART. — BRAHMANIC ART IN INDIA. — GRECO-BUDDHIST ART. — KHMER ART. — THE ART OF CHINA AND JAPAN. 159

CHAPTER XI

THE HISTORY OF CLASSICAL ARCHAEOLOGY. — PRE-HELLENIC ART. — TROY. — EXCAVATIONS AT MYCENAE AND TIRYNS. — THE PALACES OF CRETE. — PAINTING, ESCULPTURE AND GOLD WORK. 185

CHAPTER XII

ARCHAIC GREECE. — THE GREEK TEMPLE. — ORDERS OF ARCHITECTURE. — ORIGINS OF SCULPTURE. — ARCHAIC CERAMICS. 209

CHAPTER XIII

THE GREAT NATIONAL SANCTUARIES: DELPHI AND OLYMPIA. — AEGINA. — END OF THE ARCHAIC PERIOD. — MASTER BRONZE-WORKERS. — MYRON AND POLYCLEITUS. — PAINTING AND CERAMICS. 235

CHAPTER XIV

STRUCTURES ON THE ACROPOLIS OF ATHENS. — PERICLES AND PHIDIAS. — THE PARTHENON. — THE PROPYLAEA. — THE ERECHTHEUM. — THE CORINTHIAN CAPITAL. — ATHENIAN STATUARY OF THE 5TH CENTURY. POLYGNOTUS AND MONUMENTAL PAINTING. 263

CHAPTER XV

THE PUPILS OF PHIDIAS. — GREAT SCULPTORS OF THE 4TH CENTURY. — PRAXITELES AND HIS PUPILS. — SCOPAS AND LYSIPPUS. — GREEK PAINTING IN THE 4TH CENTURY. 291

CHAPTER XVI

THE HELLENISTIC PERIOD. — ARCHITECTURE. PUBLIC BUILDINGS. — THE GREAT CAPITALS. — SCULPTURE. NEW TYPES. PORTRAIT STATUES. — THE LOCAL SCHOOLS. ALEXANDRIA. PERGAMUM. RHODES. — PAINTING AND CERAMICS. — GOLD WORK AND GEMS. 329

CHAPTER XVII

THE BEGINNINGS OF ROME. — EARLY LATIN SANCTUARIES. — ETRUSCAN ART. — TEMPLES OF REPUBLICAN ROME AND LATIUM. — BASILICAS. — BRONZE-WORKERS. — THE HELLENISTIC SCHOOL OF THE CAMPAGNA. . . . 369

CHAPTER XVIII

ROMAN ART UNDER AUGUSTUS AND THE CLAUDIAN EMPERORS. — HELLENISTIC ART AT ROME. — AUGUSTAN ART. — THE ROMAN HOUSE. — STYLES OF DECORATION. — PORTRAIT STATUES. — ARTICLES OF LUXURY. . 399

CHAPTER XIX

ROMAN ART UNDER THE FLAVIANS AND ANTONINES. — THE COLISEUM. — THE ARCH OF TITUS. — TRAJAN'S ARCH AT BENEVENTUM. — TRAJAN'S COLUMN. — THE BUILDINGS OF HADRIAN. — PORTRAITURE. — THE EVOLUTION OF ROMAN DECORATIVE ART. 433

CHAPTER XX

ROMAN ART IN THE PROVINCES. — ROADS AND CITIES. — THE ART OF THE LEGIONARIES. — ROMAN ART IN THE ORIENT. — ORIENTAL RELIGIONS. — THE DECADENCE OF ART IN ROME. 467

CHAPTER XXI

ABORIGINAL AMERICAN ART. — PRESENT STATE OF OUR KNOWLEDGE. — THE ARCHITECTURE OF MEXICO AND YUCATAN. — PERU. — SCULPTURE AND CERAMICS. 503

ALPHABETIC LIST OF ARTISTS, ARCHÆOLOGISTS, CRITICS, &C. 525

MODERN PRIMITIVE ART

EGYPTIAN ART.-BABYLONIA AND ASSYRIA

PHOENICIA AND CYPRUS. MEDITERRANEAN COLONIES

THE ART OF THE FAR-EAST

PRE-HELLENIC ART

GREECE.-ROME

PRE-COLUMBIAN ART

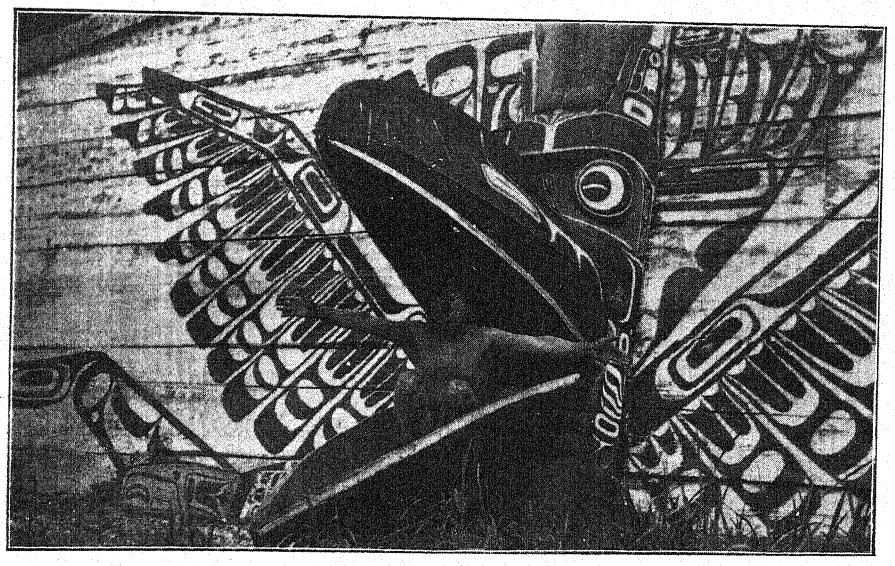


Fig. 3. — Entrance to the house of an Alaskan Indian.

CHAPTER I

MODERN PRIMITIVE ART

THE student of the beginnings and subsequent development of art feels impelled to commence with the first attempts of the child to draw what he sees. Here we find a primitive instinct to form combinations of lines making him reproduce in his own way the objects about him which have caught his attention. The child is moved by an impulse which may well be the same which, later in life, leads to the production of a great work of art.

These childish representations, apparently so spontaneous, are subject to the same laws of error which govern all the attempts of primitive peoples to reproduce what they see about them. The child does not try to represent things as they are. He does not look at them when he draws them, even though he has them before him, but turns rather to the vague picture which he has in his mind and so depends upon his memory. Every part of the body is drawn from the angle of view in which it appears in its largest dimension. The breast and hips appear in front view, the nose in profile, and a side view of the ear stands out on either side of the

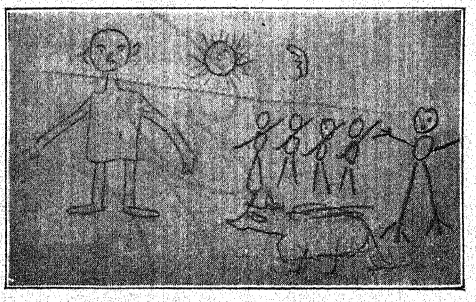


Fig. 4. — Typical child's drawing.

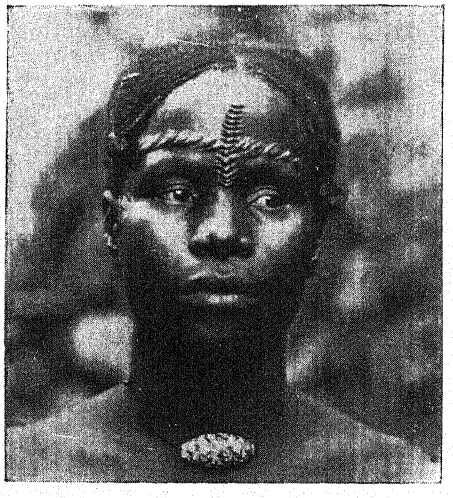


Fig. 5. — Ornamental scarification. CONGO.

face. The hands are wide open and the feet are in profile (fig. 4).

The child rarely attempts to draw many of the things he sees about him, but confines himself rather to a repetition of the limited number of types which are fixed in his memory.

The modern savage is, of course, further advanced than the child, both in his powers of reproduction and his conceptions of the world about him. The rude social organizations of the uncivilized races have been studied by explorers and missionaries; on the data thus obtained, ethnology, the science of human origins, has been founded. Fortunately or unfortunately, according to the point of view of the reader, a considerable number of savage tribes still exist in various parts of the world which present so primitive a picture of human life that we should be obliged to go far back into the life of prehistoric Europe to find its like.

The Australian natives, the Esquimos (prior to their relations with the white man), the natives of the Andaman Islands and of Tierra del Fuego, and some of the tribes of the Dark Continent are, perhaps, the lowest examples of our poor human species, and in all of these we may observe a spontaneous manifestation of the same artistic instincts that we find in the child.

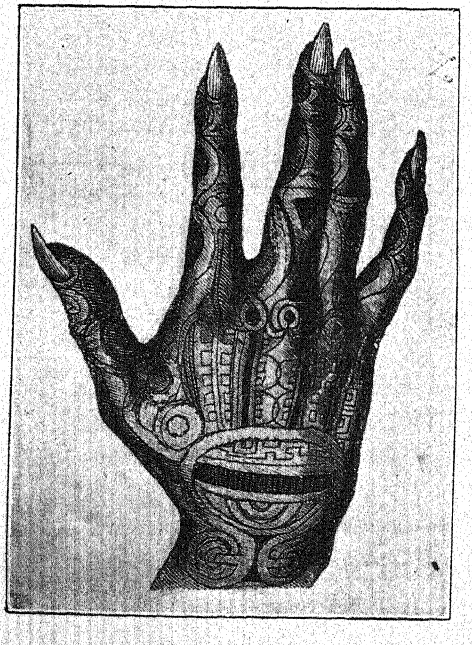


Fig. 6. — Tatooed hand of a native of the Marquesas Islands.

These people, with the exception of the Esquimos, wear little clothing, and they are all members of a group which Gross has classed as the "hunting peoples", whose only means of subsistence is hunting and fishing and whose only property consists of their rude arms and the products of the hunt. Nevertheless, we see upon the bodies of the crudest of these a primitive expression of the artistic instinct. Among the savages of the black race this consists of broad lines or

decorative excoriations, which stand out in sharp contrast to the smooth skin of their dark bodies (fig. 5).

The natives of the Congo pierce the skin and keep it from healing naturally by injecting the juices of certain irritating plants for a time. The brown Polynesians beautify their skin with the blue lines of their mysterious tatooing, which produce a sort of chiaroscuro effect (fig. 6). This taste for scarification and tatooing, whether erotic or æsthetic, seems always to be latent in the human mind, and we shall see in the following chapter how the early peoples of Europe also tatooed themselves. In recent times tatooing has been reimported into the Occident from Japan and Polynesia, and the lower classes of European society, particularly the workingmen of the great cities and ports, take the same pleasure in tatooing their limbs as did their ancestors of the stone age or the natives of Polynesia. A similar taste survives at times in teven he upper classes. The scarred face of the German student is not only an evidence of his strength and spirit, but the scar itself, standing out against the delicate Germanic skin, is considered ornamental. An

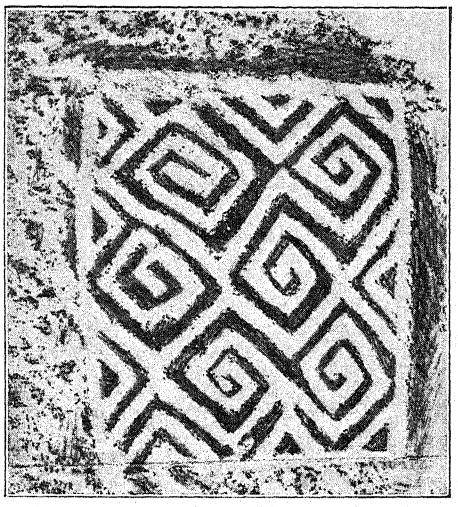


Fig. 7. — Incised carving in the cave of the *Guácara del Comedero*. SANTO DOMINGO.

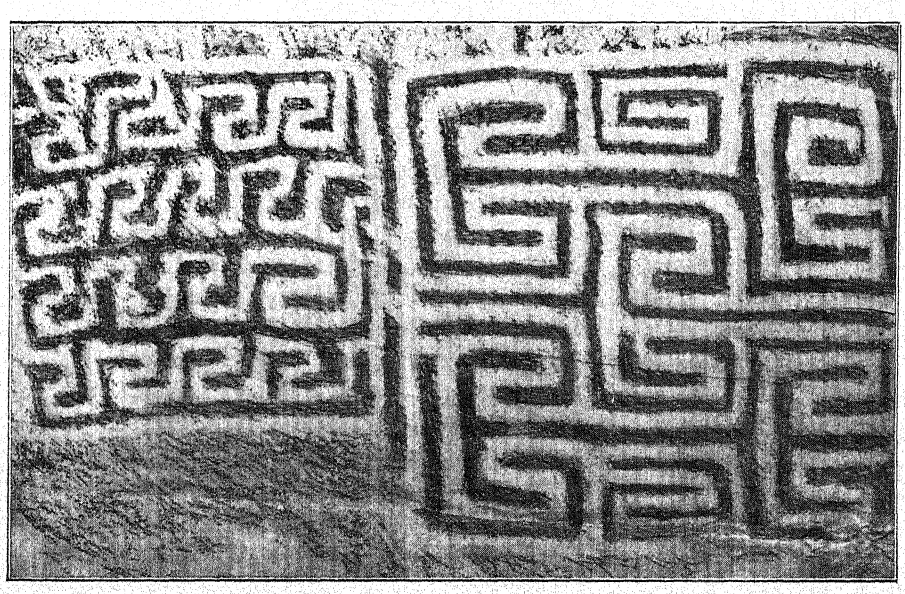


Fig. 8. — Design incised on the wall of a cavern of the Sierra Prieta. SANTO DOMINGO.

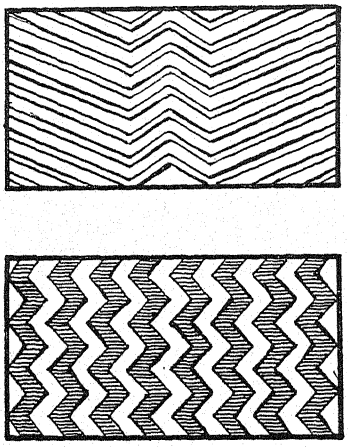


Fig. 9. — Ornamental designs of the Indians of Brazil.

effect of tatooing is also produced by the figured veil of the lady of fashion, the shadow of which throws the natural color of the skin into strong relief.

Strangely enough, the bakers of Spain and some other countries ornament their loaves of bread in much the same way by cutting slashes in the top of the loaf just before baking it, and thus producing scars very similar to those which adorn the skin of the Congo native.

Primitive peoples also paint their faces, breasts and arms with vivid colors. The Australian native, wandering from morning to evening in search of game, carries the pigments necessary to his toilet in a bark roll. Each color has its own symbolic meaning, some signifying mourning and others a festive occasion. Youths are only permitted to paint themselves after the elaborate initiation which occurs at the age of puberty. Some African tribes concede a monopoly of the use of certain colors to their rudimentary priestly caste.

Practically all these peoples who are still in the hunting and fishing stage of development wear necklaces of shells and glass beads, and spend a considerable portion of each day in making their toilet. Many endure painful operations in order to add to their beauty, such as elaborate tatooing and scarification. Surely personal adornment is natural to man, and it is very possible that it is the earliest manifestation of the artistic instinct.

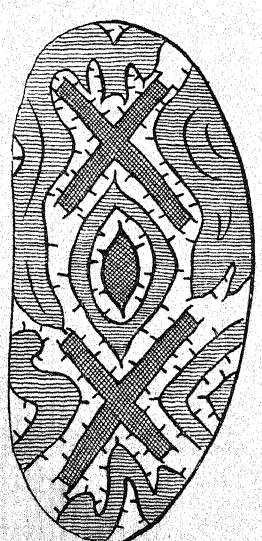


Fig. 10. — Australian shield.

The question now arises: does the savage scarify, tatoo and paint his skin solely for ornamental purposes? It is rather important to know whether he has acted from æsthetic motives or from others, possibly religious or utilitarian. These markings may well be heraldic devices to distinguish their bearer or bring terror to the heart of the enemy, and this often proves to be the case. Indeed the Indians of British Columbia reproduce the form or markings of some sacred animal.

It has been thought that these strange curves tatooed upon the human skin may be only the expression of a mysterious rhythm within the soul of the savage, but it seems more reasonable to believe that they represent some exterior object which has made an impression on the primitive consciousness, and which we ourselves are unable to recognize (fig. 6). These parallel, circular and elliptical lines, apparently following only the caprice of the designer, form

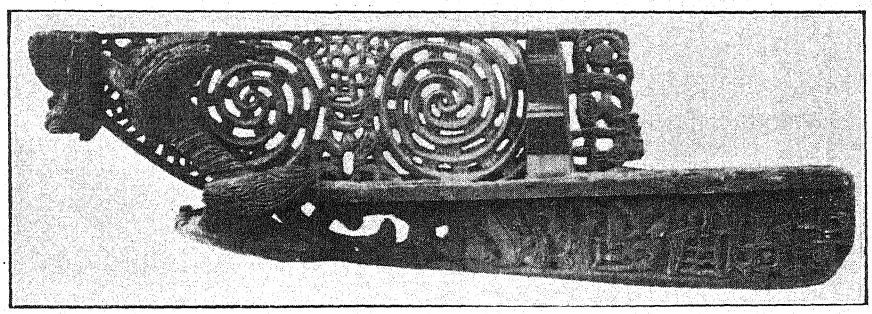


Fig. 11. — Prow of a Maori canoe. NEW ZEALAND.

something not altogether dissimilar to what we shall later call geometrical decoration. It does suggest that art was originally not merely an imitation of the objective world, but the expression of something within man himself like a musical rhythm of form felt within the human soul.

The same is true of the decorative art found in the caverns of America (figs. 7 and 8). Rarely do we find in these caves the reproduction of any natural form, but rather Grecian frets, combinations of curves and interlaced rectangular designs.

But as we come to know these primitive peoples better, and scientists acquire more data and understand better that which they already possess, the nature of the problem changes and many of these primitive decorations take on an imitative character.

This is certainly the case with ornamental art. If one visits for the first time a museum of comparative ethnology and views the collections of arms, utensils and other objects taken from tribes still living, he sees at first only curved and rectangular designs which represent nothing in the world which he is able to recognize. He is consequently much surprised to learn that some of these designs are true copies of the bright markings on the skins of certain living creatures, or else reproduce their movements. They are, in other words, reproductions of concrete impressions made upon the finely perceptive senses of the natives.

Nowhere, for example, has such ornamentation a more geometrical character than among some of the Brazilian tribes. Nothing in their work, at first sight, appears to be the representation of any natural object. But Ehrenreich, who has made upon the ground an extensive study of these designs, has proved beyond contradiction that they represent some of the animals most common in that country. One of these (fig. 9),

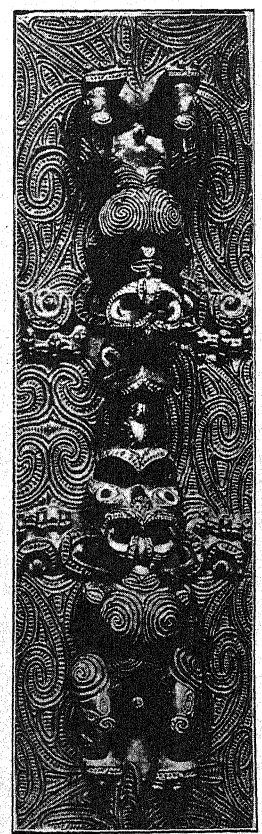


Fig. 12. — Decoration of a wooden chest. *Maori Art.* NEW ZEALAND.

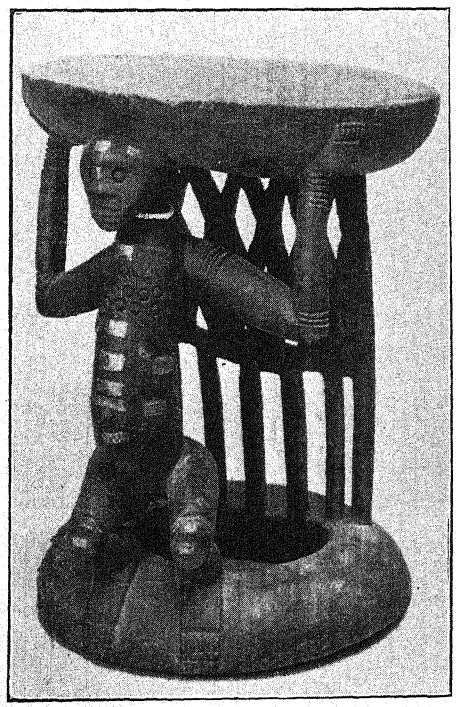


Fig. 13. — Wooden throne. *Negro Art.* THE CONGO.

which seems to be simply a combination of parallel zigzag lines turns out to be the representation of the extended wings of a bat, while the other represents the outlines of a number of serpents.

The most likely solution of this problem is that the savage, when he draws these forms, intends to represent natural objects, but, like the child, he does not reproduce them as he sees them, but rather the impression they have left in his memory. These he has repeated time after time and conventionalized until they have lost all resemblance to the object which inspired them.

This rather contradicts the theory that the same spontaneous artistic instinct has existed in all races. For example, when it was first learned that the cross or the circle occurred in the decorative designs of all primitive peoples, there was supposed to have been a uniform elementary repertory of art inherent in all. Since it did not proceed from any external reaction and was not a reproduction of natural forms, it was believed that it must have been instinctive. Furthermore, as it occurred among the most widely separated peoples living under the most varied conditions, it was considered to have been an inheritance of the human species. Hence, the origin of art among the different races of men was something which had to be. Men were destined to begin with the same geometric decorative forms which would naturally follow the same types.

The similarity of certain ornamental elements in the art of the primitive American peoples to the artistic attempts of the earliest inhabitants of Europe, has caused investigators to seek a common origin for both, or at least some cultural connection between them at a remote period of antiquity. It is needless to say that the greatest caution should be observed in formulating any such hypotheses.

We now see that although certain forms appear to coincide, they are really intended to represent very different objects. Besides, primitive man sees both line and color in a very different light from his civilized brother. Things which appear to be identical in our eyes are very different in theirs; that which is merely geometrical to us may express a natural form to them. The Australian native can recognize at a distance the faint trail which leads to his hut, and the savage inhabiting the virgin forest easily follows tracks which are invisible to

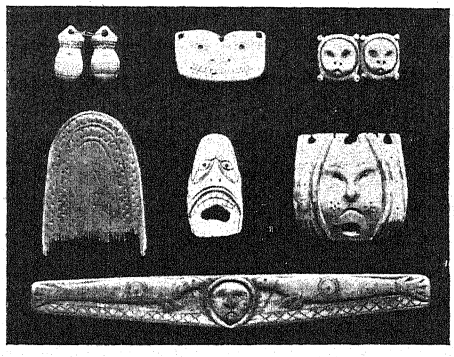


Fig. 14. — Articles carved from ivory by the Esquimos in imitation of natural forms.

Fig. 15. — Small bone carvings by Esquimos representing caribou.

the European eye. It is not to be wondered at therefore, that the design on the Australian shield (fig. 10), which is meaningless to us, represents the markings of a snake-skin to the owner of the article. It is not unlikely that the savage sees in the serpent lines and forms which entirely escape our attention, for we, as a rule, notice only the general outline, and the color of the reptile as a whole. On the other hand, if we show to a Congo negro an instantaneous photograph of one of his companions with its masses of light and shade, it is more than likely that he will not recognize it at all.

Primitive peoples, therefore, have an especially sharp perception of the details of the objects about them, and of these details they compose excellent geometrical designs, like the Maori reliefs reproduced in figures 11 and 12. Truly, nothing comes forth from within us that has not already been absorbed from the objective world without and through the intermediary of the senses, so it is interesting to note that art in its beginnings was what it must always be, a reaction from within to an external stimulus.

In addition to this decorative geometric art, some primitive peoples possess the faculty of reproducing animals, objects, persons, and even of composing scenes with a realism amazing to us, accustomed as we are to great works of art. We shall begin with a discussion of sculpture, for it comes first chronologically.

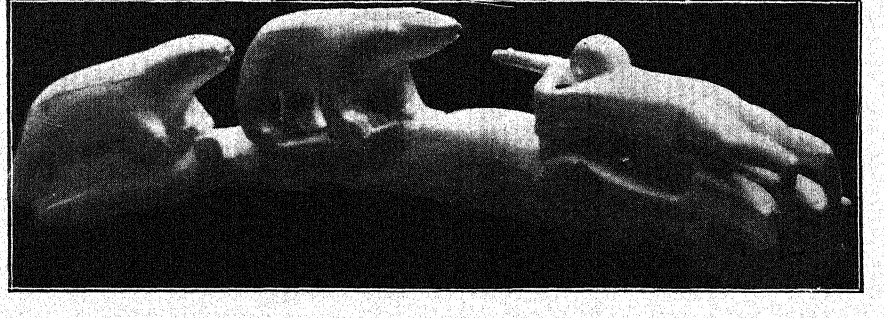


Fig. 16. — Bone carving made by the Esquimos of Prince of Wales Island.

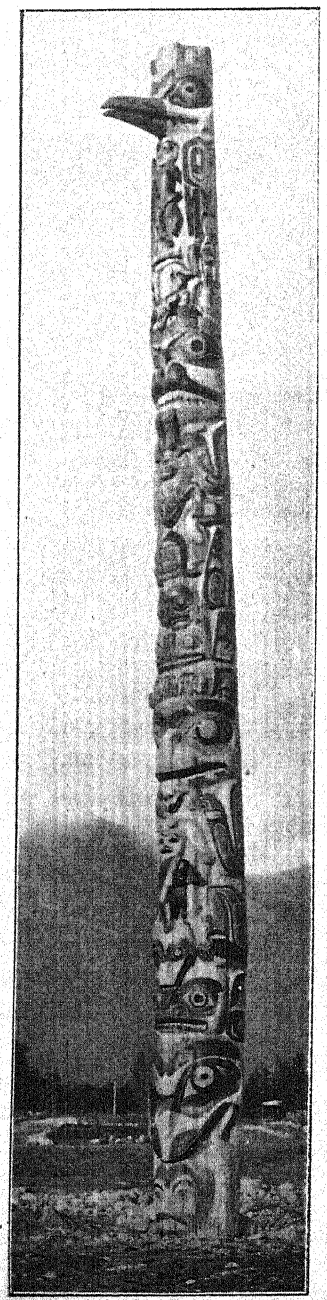


Fig. 17. — Totem pole. *Jasper Park.* CANADA.

At least the prehistoric peoples of Europe carved objects with artistic realism before they painted their pictures, as will be seen in the following chapter. Among existing primitive peoples, it is difficult to ascertain which came first. Climate and location are a greater factor in influencing a people's tendencies in either direction than is the stage of culture achieved.

Much interest has been awakened in recent years in the so-called Negro art, that is, the sculptures and reliefs of the natives of the Congo and Dahomey. Here we find the same tendency toward the simplification of nature and its observation in a state of motion as that exhibited by the artists of the modern cubist school. The sculpture of the negroes of the interior of Africa consists principally of masks, vessels and throne-like seats painted with vivid shades of red, ochre and blue (fig. 13).

In strong contrast to these polychrome carvings in large planes are the statuettes and reliefs of the Esquimos. In their snow huts the latter carve caribou-antlers and walrus-ivory into small human figures, toys and amulets in the form of animals (figs. 14 and 15). The handles of their spears are ornamented with hunting and fishing scenes and with miniature kayaks, or canoes of sealskins stretched over a pointed frame. Their art consists almost entirely of carvings in the full round and in relief, an effect, no doubt, produced by the white icy wastes surrounding them for a great part of the year during which little color is to be seen. As their principal occupation is hunting and fishing, they are obliged to carve spears, harpoons and fish-hooks from bone and walrus-ivory, and have thus acquired an especial technique of sculpture. They hardly ever paint their bodies, as they are dressed in skins, and tatooing can not acquire the importance it possesses among the naked peoples of the tropics.

Besides articles of practical use, the Esquimos carve small toys and figures of bone and walrus-ivory, the value of which appears to be purely æsthetic, indicating that art among them has reached a stage in which the only incentive is the pure joy of creating (fig. 16).

Fig. 18. — Grave sculptures. *Easter Island.*

These small sculptures are now collected by travellers, not only for museum purposes, but also as valued articles of commerce. Originally, however, they were objects of art in the true sense of the word; possibly they were amulets intended to bring good fortune in hunting and fishing.

A universal law of the primitive mind is the belief that the reproduction of an object insures the possession of the original. It was well to carry along one's god, the figure of a propitious spirit, of the animal one wished to hunt, or of the kayak to which one trusted one's life on the cold sea. It is not necessary that the reproduction be an exact one; a fragment is sufficient, a mask of the *totem,* as the protecting animal is called. This circumstance of a portion of the whole sufficing for totemic purposes constitutes an explanation of the elemental simplified decorative art which has already been discussed. It is possible that the mysterious tatooed designs or that of the Australian shield are not intended to represent more than a portion of the skin of a snake and have the same magical purpose as the small figure of a caribou carved from a bone, which the Esquimo wears hanging from his neck to insure a happy outcome to the hunt.

It is sufficient sometimes to draw the reindeer on the weapon called a *throwing-stick* which serves to hurl the projectile or harpoon. We shall soon

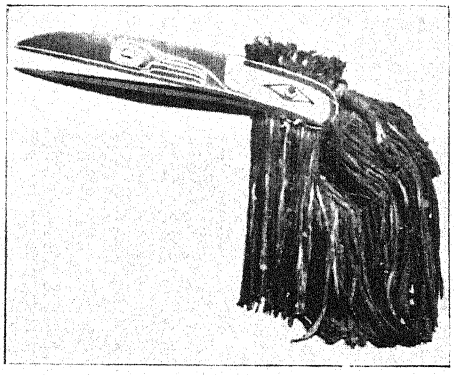


Fig. 19. — British Columbiam ceremonial dance-mask.

see that the European prehistoric man had weapons sculptured with the images of the animals he was hunting.

Another superstition common to primitive minds is the belief that by wounding the image of a person or animal, the same effect is magically produced upon the original of the image. Thus by spearing the miniature figure of a caribou, it is believed that the hunter will later be able to wound or kill the animal itself.

Savages in a low state of culture rarely possess idols, but they create grotesque hybrid figures with monstrous heads and unnatural bodies, which they believe will protect them from spirits and devils and ward off evil influences from their homes. The Indians of the Pacific North West, with a rudimentary sense of history and genealogy, carve upon long poles or masts the various totems which, one after another, have been inherited or otherwise acquired by the owner of the pole. In other words, it is a plastic representation of that man's "story", as the Indians themselves put it. A totem may have been acquired by means of a miraculous

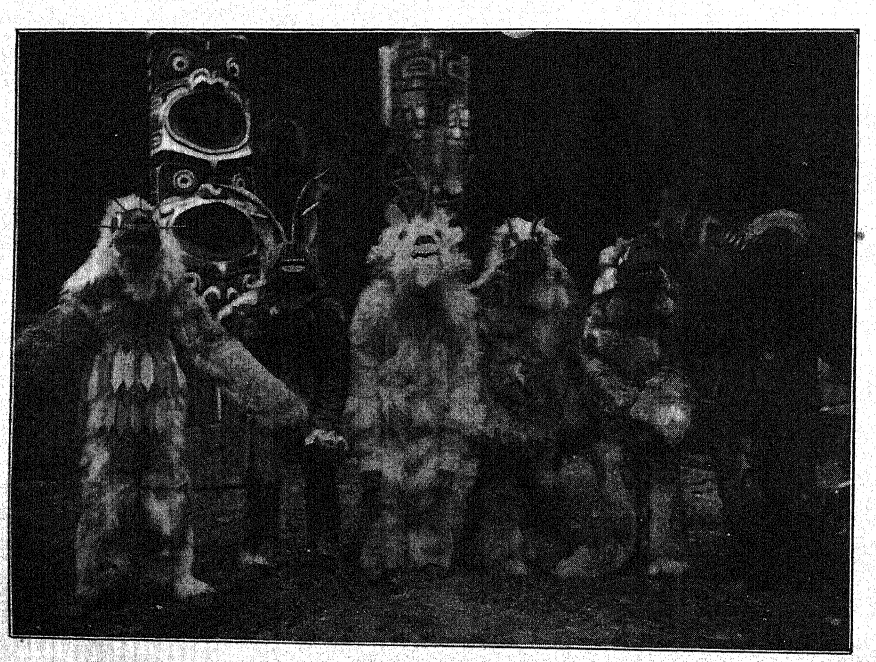
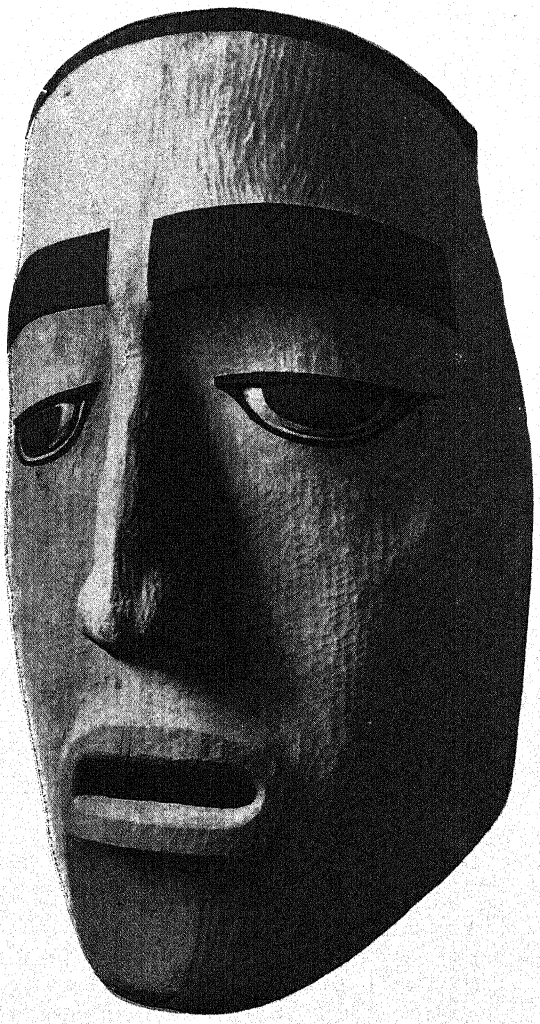


Fig. 20. — British Columbian Indians dressed as totem-animals and taking part in a religious dance.



Ceremonial dance-mask of the Indians of British Columbia.
(Royal Ontario Museum.)

adventure, or it may have been inherited. In certain tribes, institutions are based on descent in the female line, and the husband may come under the protection of his wife's totem. A totem may be won by conquest, for the death of an enemy gives his slayer the right to acquire his totem. Thus these mythical beings carved upon the tall cedar pole set up before the home of the owner form a sort of coat-of-arms and a defense against witchcraft (fig. 17). The carving of these poles and of dance-masks stimulated the art of sculpture among these people. All primitive peoples possess almost instinctively this taste for mimic dances in which the dancers wear masks representing the animal or spirit which protects the family or the clan (figs. 19, 2C, 28 and Plate I). Our prehistoric European ancestors danced in the same manner; the dance had an especial connection with the superstitions of the hunter who must perform a certain ritual in order that the hunt, his means of subsistence, might be attended with success.

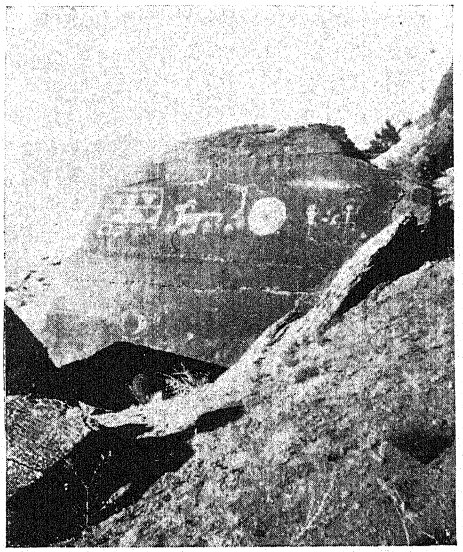


PHOTO ARGUS

Fig. 21. — Rock paintings made by the Indians of the Southwest of the United States.

Still, there exists in mankind a latent artistic force which seems to lose no opportunity to manifest itself in works of ever increasing importance. Take, for example, the colossal sculptures found on Easter Island, to which the natives ascribed a purely mythical origin when questioned by the first white explorers. These sculptures evidently belonged to a culture still in the stone age, but which had developed in no very remote period in that little unknown island in the southern Pacific Ocean so far from any other group of islands (fig. 18 and Plate II). And yet the power and precision with which the hard rock is carved are amazing. These statues possess a sim-

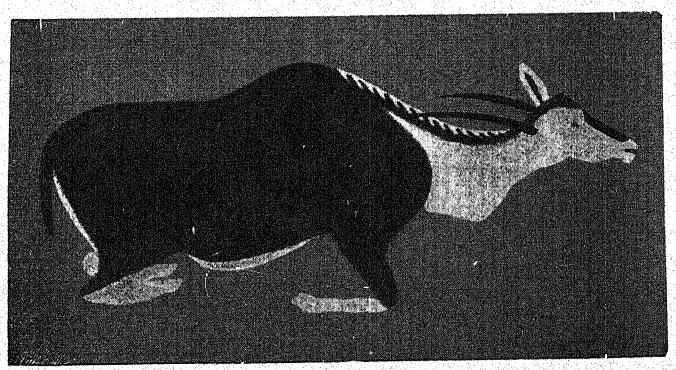


Fig. 22. — Bushman drawing of leaping antelope.

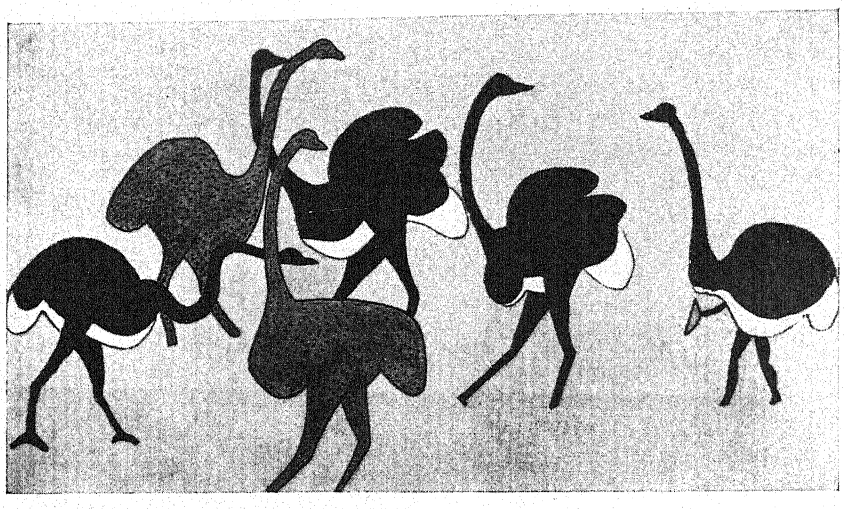


Fig. 23. — Fresco representing a hunter disguised as an ostrich. CENTRAL AFRICA.

plicity that is marvellous, and they seem to express something fateful and genesial, pertaining perhaps to some rude form of worship, but, nevertheless, not unlike some of the things hidden in the depths of our own consciousness. Strangely enough, the Easter Island sculptures are the most perfect ever carved in the full round by a primitive savage race. Only the prehistoric hunters of the reindeer of glacial Europe have produced a sculpture superior to that of Easter Island in the field of primitive culture and art.

Taking up the subject of painting, we note that while the denizens of the white polar wastes display an especial aptitude for sculpture, it is among the hunting tribes of Africa and Oceania that we find primitive painting at its best. Upon the walls of their caves they paint magical pictures of the animals they hunt, or they carve their outlines upon the high rocks, sheltered from wind and rain, which are adapted to form a sanctuary for these hunting peoples. Their life in the open and their dependence upon the hunt have developed in them an especial aptitude for the observation and reproduction of the swift movements of wild animals, many of which are too rapid to be caught by the slower eye of civilized man. These paintings are usually found in sacred spots to which women and the uninitiated are forbidden access.

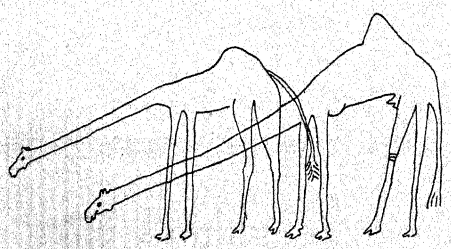
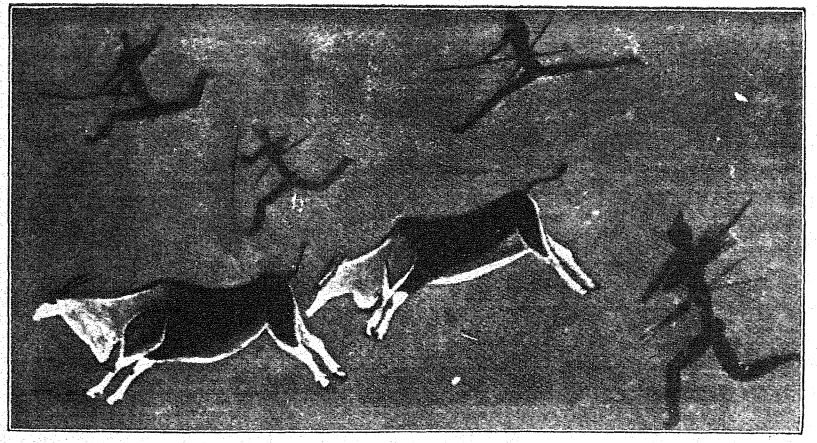


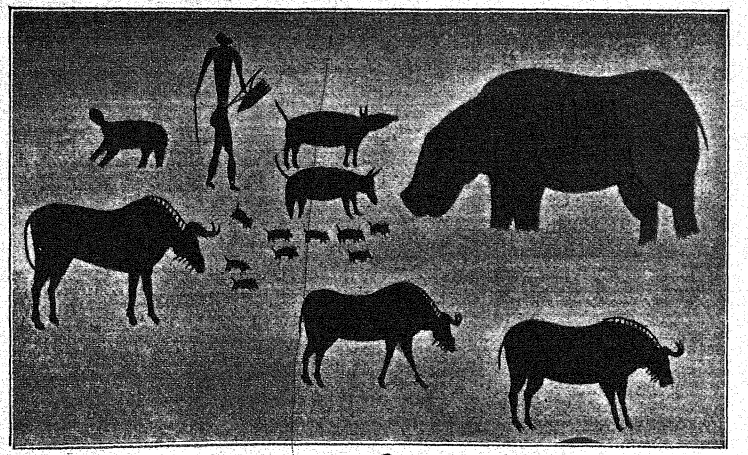
Fig. 24. — Dromedaries. (Arabian rock drawing.)

Still this realistic style is not the first to appear. As they begin to represent animals and men, nearly all primitive peoples avail themselves of what might be called a schematic figure for their pictures, and this persists for a considerable time. These conventionalized fig-

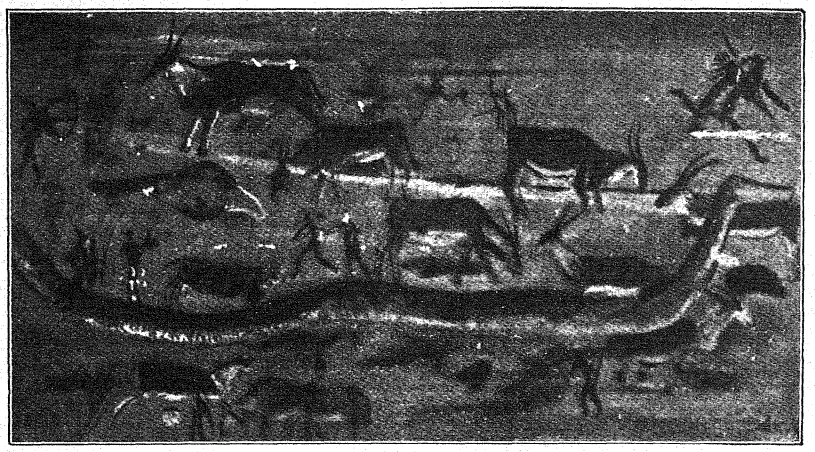
A



B



C



D

Fig. 25. — Bushman rock paintings. *Rhodesia.* CENTRAL AFRICA.
A. Battle scene. — B. Hunting scene. — C. Shepherd and flocks. — D. Cattle grazing by river.

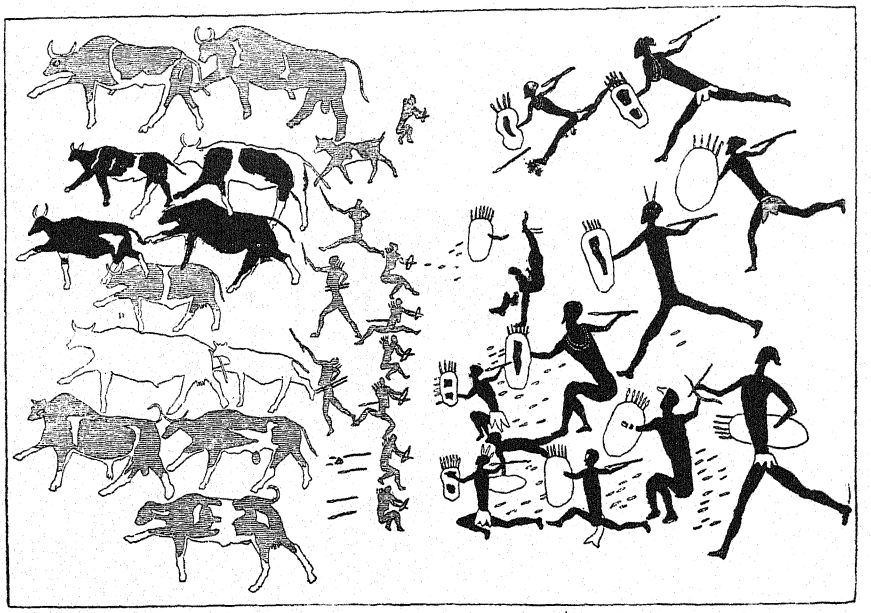


Fig. 26. — Fresco representing a battle between Bushmen and negroes.

ures of animals and of men with raised arms have a remarkable resemblance to one another, whether they are Polynesian frescoes or sketches made upon the rock by the Berbers of North Africa or North American Indians (fig. 21). The earliest style of painting, therefore, would consist of these schematic animal forms which follow the purely decorative patterns. But a time comes when the primitive artist makes a great step in advance. He no longer relies entirely upon these schematic figures which have become fixed in his memory, but begins to pay attention to the actual forms existing in the world around him. His perceptions, now no longer wearied by the forced exercise of an intensive culture, permit him to appreciate his surroundings with a keen vision extraordinarily adapted to the observation and recording of the swift movements and fugitive aspects of life about him. Later, his art degenerates into an extreme realism; animals are represented in the act of leaping, as if taken by a photographic plate (fig. 22). Sometimes the peculiar movements which characterize a particular species are recorded, like the oscillation of the curved neck of an ostrich (fig. 23), or the stretched neck of a dromedary feeding on the scanty pasturage of the desert, found in an Arabian drawing (fig. 24).

Sometimes these savage peoples, such as the Bushmen, succeed admirably in painting scenes of a complicated nature which are really studies of life. Most interesting is the picture of a battle between Bushmen and the hostile negro tribe which attempts to steal the cattle from their herds, painted upon the wall of a cavern in Central Africa. It is curious to note that the victorious Bushmen are of exaggerated size, just as all primitive peoples represent persons as larger

or smaller according to their relative rank and importance (fig. 26). It must be admitted, however, that these African paintings are the work of a people who have been more or less in contact with civilized peoples. At times the Bushmen even give some impression of the surrounding country, and their pictures represent almost all the native animals, such as hippopotami, antelopes and cattle. Their pictures are far in advance of those of the Australians, Polynesians and North American Indians. Their technique is most simple, for the Bushmen paint upon an unprepared rock surface with earthen colors and ochres mixed with grease.

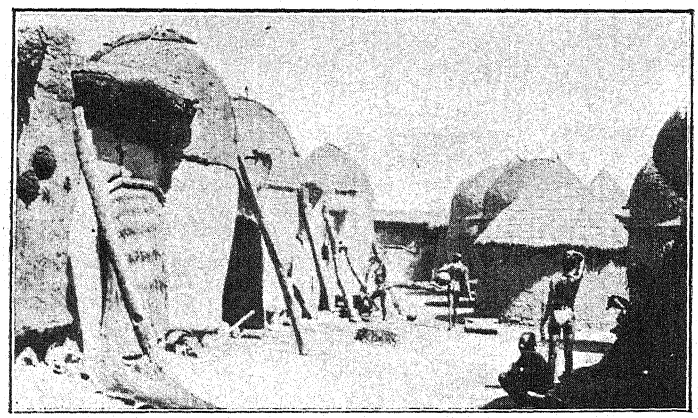


Fig. 27. — Circular huts of the natives of the Congo.

So far as we have any knowledge of the art of these primitive peoples, their artistic progress consists in adding their observations of nature to their repertory of mental images, seen in their largest dimension. From mental images, they pass on to physical representations, adding to the former their new observations and various accessory details.

Some primitive races, like the Australians, have no houses worthy of the name and no conception of even the rudiments of architecture. Others live in huts of bark or of woven branches and shoots thatched with great leaves of the tropical forest. In the hottest portions of Central Africa, the heat drives the inhabitants to the construction of huts with thick walls of clay, and these have a certain architectural form. The natives of the Congo live in circular clay huts thatched with straw, set alongside one another like cells in a bee-hive (fig. 27). The houses about Lake Chad are also of clay, but these are rectangular in shape and their walls are thick and slanting and have no windows. The flat roof, also of beaten clay, is supported by wooden beams and resists the noonday heat of a tropical sun, from which even the acclimated native is obliged to seek protection. The snow huts of the Esquimos, or *igloos* as they are called, are also circular, and except for a low entrance, have no openings in their dome-like walls.

But the primitive peoples of our own times no longer erect commemorative monuments such as a solitary stone set up to perpetuate the fame of a hero or to record the date of a great event. We can only infer that the feeling of the unity of one generation with another, the inspiration of such a work, no longer exists among savage peoples.

Summary. — Art is one of the prime necessities of mankind. Both children and savages are governed by the same erroneous rules in their drawings. They reproduce an object, not as it is, but according to the mental picture they have formed of it. The ornamentation of the body is perhaps the first step along the line of artistic progress. Art is at first purely ornamental and largely geometrical, but soon even the most primitive peoples begin to observe nature more closely and reproduce it from instantaneous glimpses. The development of sculpture precedes that of painting; masks are carved for ceremonial dances, and most important of all, weapons are decorated with carved ornaments. In their aptitude for art, the Bushmen stand first among primitive peoples. Their frescoes greatly resemble those of the caverns of prehistoric Europe. In all primitive peoples, architecture is more or less rudimentary; commemorative monuments are almost unknown.

Bibliography. — On the art of primitive peoples: GROSSE: *Anfänge der Kunst;* French translation, *Les Débuts de l'Art;* Spanish translation published by Enrich y C.ª — On the sculptures of Easter Island: Bibliography in *Man,* the organ of the London Anthropological Society, 1908.—ROUTLEDGE: *The Mystery of Easter Island,* 1920.—Upon the origin of art in general, see: LANGE: *Darstellung des Menschen in der Alteren Griechischen Kunst,* 1899. — LOEVY: *The Rendering of Nature in Early Greek Art,* 1907. — SULLY: *Art des enfants.* — RICCI: *Arte dei Bambini.* — EHRENREICH: *Beiträge zur Völkerkunde Brasiliens.* — K. VON DEN STEINEN: *Unter den Naturvölkern Central-Brasiliens.* — M. DE ZAYAS: *African Negro Art,* 1916. — FRANZ BOAS: *The Kwakiutl Indians,* 1895. — W. J. HOFFMAN: *The Graphic art of the Esquimo,* 1895.

Periodicals. — *Folk-lore,* London. — *Journal of American Folk-lore,* Boston.— *L'Anthropologie,* Paris. — *American Anthropologist,* Washington.

Fig. 28. — Ceremonial head-dress for a dance. *Alaska.*

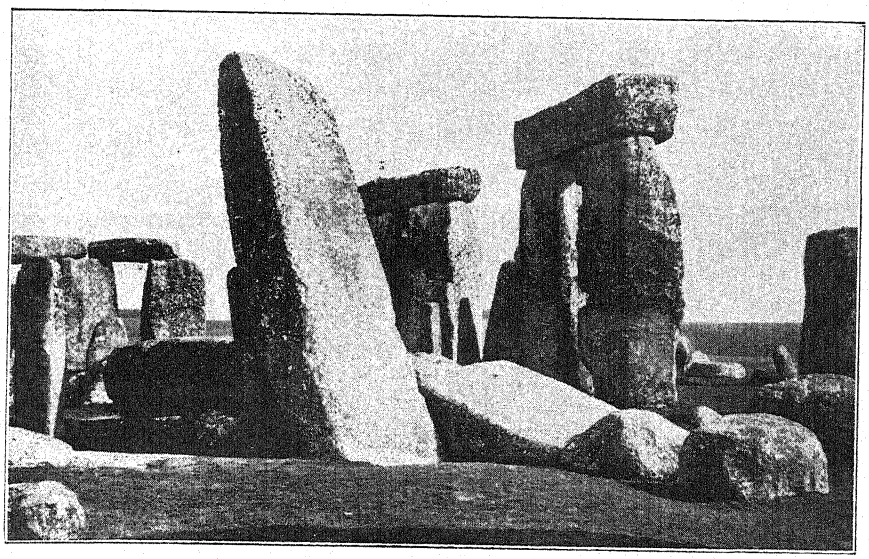


Fig. 29. — Megalithic monument at Stonehenge. ENGLAND.

CHAPTER II

ART IN THE REINDEER EPOCH. — NEOLITHIC ART.

To find in Europe an art at all resembling that of the savage peoples living today, it is necessary to go back thousands of years before the dawn of history and the knowledge of metals to the stone age of the later Glacial period. Toward the end of this long epoch, northern Europe was still covered by an ice-cap. The Alpine glaciers extended down into the middle of France, and it is probable that the reindeer pastured on the glacial lichens which were their principal food even beyond the Pyrenees, in Spain itself.

The course of human industry seems to have suffered an interruption at this time. This period may be said to have constituted a dividing point in the long age of stone, which consisted of the Palaeolithic, or old stone age, and the Neolithic, or new stone age. Between the two was the strange period during which most of man's tools were of bone or ivory. From the early Quaternary period man had progressed in the manufacture of his stone implements; indeed, it was almost his only industry. But now he abandoned it to a certain extent and began to make use of reindeer-antlers, bone and ivory for his handles, knives, spears and implements of every sort. Prior to this time his tools and weapons had been of rudely chipped silica. We first find flints which can be positively identified as the work of the human hand in the alluvial deposits of a period called the Chellean. These are rude bits of stone which have been chipped by fracture or pressure until they have an edge or a point (fig. 30). Little by little man was driven by his necessities to learn to fashion those marvellous

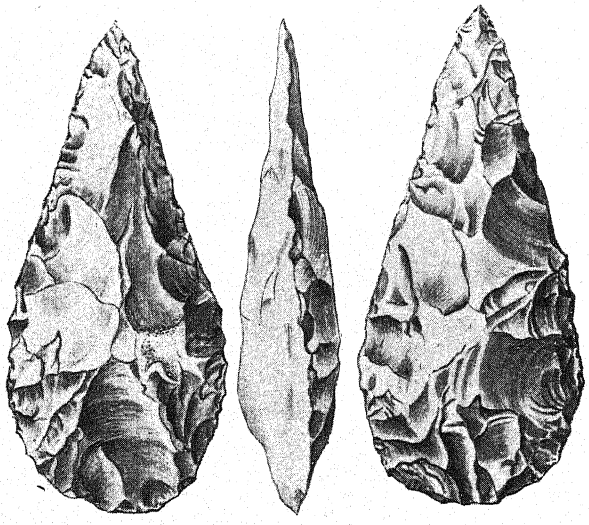


Fig. 30. — Stone axe. San Isidro. MADRID. *Lower Chellean.*

lance-shaped flints which have almost the delicacy of a leaf and, a beauty that is truly artistic. This industry was well on its way toward the production of the perfect chipped stone tool, when its development was interrupted by the last cold period of the Glacial epoch. Geologists who have studied the rate at which the Alpine glaciers have receded, have placed this period as recently as twelve thousand years ago, though many consider its antiquity many times as great. In any case, the fauna of Europe changed, and man, who had up to this time ranged about the country without any fixed shelter, was now compelled to take refuge from the cold in the caves which had already sheltered the ferocious cave-bear, *ursus spelæus*. Reindeer-antlers, bone and ivory were substituted for stone as the material from which man's tools and weapons were fashioned. This substitution of bone for stone is so characteristic of the period that it has been named the "ivory period" by some investigators. Today we find the reindeer only in the far north, and we have already noted the Esquimo's aptitude for sculpture. So also was prehistoric man a sculptor before he became a painter. The manufacture of his fish-hooks and spears taught him the technique of carving ivory. He made a harpoon which he used for hunting as well as fishing, for its cord was useful to the hunter in the capture of wounded game, and with his rude weapons it would be more often wounded than killed outright by the first thrust. This is probably the explanation of the frequency with which we find harpoons in the caves of the reindeer-epoch, far from the sea and from any rivers, the fish of which would explain the large size of the harpoons.

Besides its shaft, another appliance was used in connection with the harpoon; this was the dart-thrower. It is a fairly long stick which the Esquimos are still fond of covering with ornamentation, and the hunter of the reindeer-epoch made this device the vehicle of some of his finest artistic work. The harpoon, properly speaking, is only the projectile; it is the throwing-stick which is the real weapon. A fine example is the Bruniquel dart-thrower, now in the Museum of Saint Germain (fig. 31), which is carved into the figures of two reindeer, one in front of the other. It was found broken in two and the figures were at first supposed to have been independent. It is only recently that they were found to fit together so as to form a perfect throwing-stick. We cannot but

admire the ingenuity with which the prehistoric sculptor took advantage of the shape of the bone to carve the two reindeer crouched, ready to spring. The facility with which the posture and movement peculiar to each animal is reproduced is amazing indeed, the art of this period may well be compared with the most expressive works of our modern art.

Another article which prehistoric man ornamented with some of his finest carving was the so-called commander's baton. This was also made of the antler of a reindeer and was ornamented with carved figures of many of the commoner animals of that period.

Besides the harpoon and the commander's baton, we find in various museums collections of small figures, idols or toys, carved from ivory, which are not unlike those made by the Esquimos (fig. 32). These are of unequal merit, but in some of them the hunter of the reindeer has shown himself to be a finished artist, capable of reproducing with curious intensity the animals of his time in postures that are most expressive. Piette, the principal illustrator of these figures, has been so carried away by his admiration that he has ascribed an almost academic training to the artists who created them. He believes that we have the trial sketches of these engravers of a bygone age; in these engravings one outline is superimposed upon another, and it is interesting to follow the artist through his various trial attempts to the figure which was his final choice. The excellent technique of some of these works is the more to be admired when we consider that their only engraving tool was a rudely chipped piece of flint (figs. 33 and 34).

Fig. 31.— Dart-thrower from Bruniquel. *(Saint-Germain Museum.)*

Most of the engravings found in these caves as well as the ivory carvings represent only the animals common in Europe at that time, such as the reindeer, mammoth, Equida or fish. Among the smaller carvings found in these caves we sometimes also find the human figure reproduced. Nearly always it is that of a nude woman with masses of adipose tissue about the abdomen, reminding us of the preference shown by some African tribes for beauty of the corpulent type.

Especially interesting is the palaeolithic figure named the Venus of Brassempouy, from the cave near that place where it was discovered. This nude figure precedes by many thousands of years the Venus of Praxiteles which was the first representation of the female form in classical art without a mantle or drapery of any sort. The Venus of Brassempouy was found without head, arms or legs (fig. 35), but the head of another female figure was found on the same site in this

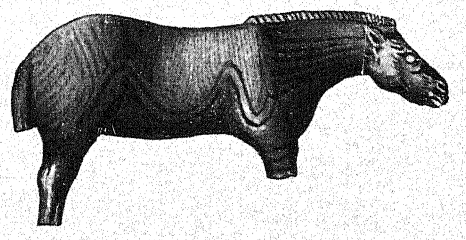


Fig. 32. – Horse carved from ivory. *(Lourdes.)*

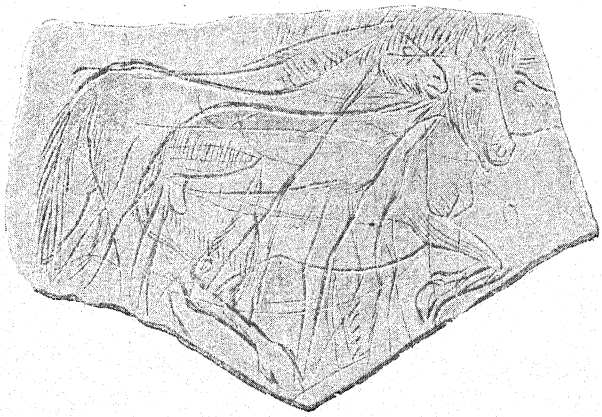
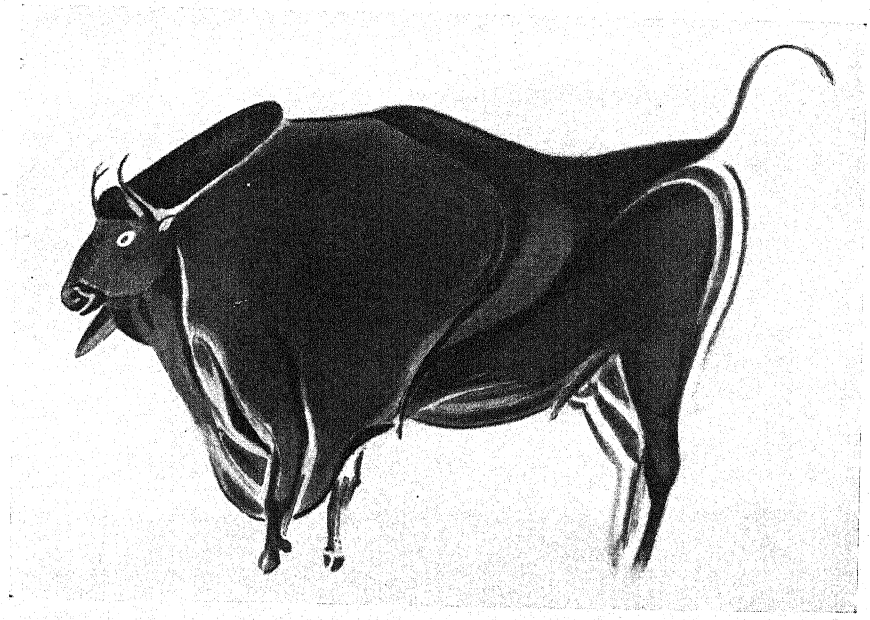


Fig. 33. — Group of horses incised upon a calcareous stone. Cave of Bruniquel *(Tarn-et-Garonne)*.

cave. This was also carved from ivory and, together with the torso just mentioned, gives us an excellent idea of the type. The low slanting forehead corresponds to the skulls of palaeolithic man in our museums. The arrangement of the hair is interesting and there is a melancholy expression in the eyes which adds a certain charm to the entire face (fig. 36).

Representations of the male human figure are much rarer, both in reliefs and carvings in the full round which date from this period. Strangely enough, even the few that have been discovered have monstrous heads resembling those of animals and recall the masks used by savages today. The scarcity of these figures has given rise to the belief that these hunters of the reindeer had the same prejudice against reproducing the human form which has characterized so many peoples in the course of the history of the world. In the light of our present knowledge, however, it seems more reasonable to believe that this preference for animal forms was nothing more than one of the results of a belief in the magical use of such figures. Equally rare are representations of plant forms; only on a few reindeer bones do we find engravings of the lichens and algæ

Fig. 34. — Bison modeled from clay. Cave of Tuc d'Audoubert *(Ariège)*.



Male bison. Cave at Altamira. SANTANDER. *Spain.*

Female bison leaping. Cave at Altamira. SANTANDER. *Spain.*

which would be a prominent feature of the landscape of that cold period.

The reindeer, naturally, is more often represented than any other animal. The prehistoric artist has preserved for us a vivid picture of this fleet animal, sometimes in the very act of leaping, again with lowered head peacefully cropping the scanty pasturage. We see the horse, no different from what it is today, as well as the mammoth and the deer. All are wild animals, the quarry of the hunters of that period.

Fig. 35.—The Brassempouy Venus (torso).

Up to comparatively few years ago the only sculptures by these people of which we had any knowledge were the diminutive figures ornamenting small ivory objects such as throwing-sticks and batons, indicating that sculpture was only a secondary art among these prehistoric peoples of Europe, and that they conserved their more serious efforts for the execution of the great wall paintings for which they are famous.

Fig. 36.—Head of the Venus of Brassempouy.

Recently, however, great sculptures have been discovered, the scope of which parallels that of the wall-paintings. M. Breuil has made known to the world some imposing friezes carved in a cave near Cap Blanc. Here we find a series of horses identical in style with the small ivory figures, but larger than natural size (fig. 37). A fragment of another frieze was discovered in 1912 in a cave in the Department of Ariège (fig. 34), consisting of a series of bisons modeled from clay.

As has been stated, the ivory figures were known before we had any knowledge of paintings dating from this period. The discovery of the latter was, therefore, most sensational, for their artistic importance far surpassed that of the sculptures. There was a cave at Santillana del Mar near Santander which contained many chipped flints and extensive remains from fires used for domestic purposes. It had been explored many times by its discoverer, Don Marcelino de Sautuola, but the roof was so low that it was impossible to enter without crouching. Due to this fact, Sautuola had often gone in and out without noticing the paintings in plain sight on the low roof of the cave. It was not until 1880 that his little grand-daugh-

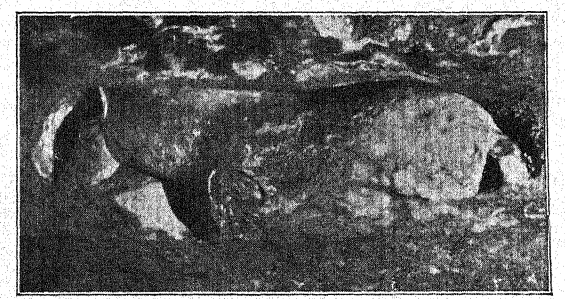


Fig. 37.—Horse sculptured in the cave of Cap Blanc. (Length 7 feet 7 inches.)

ter accompanied him on one of these visits and called his attention to one of the "oxen". It was a handsome and well preserved painting of a bison, the best in the entire cave (Plate III). The roof was found to be covered with excellent frescoes, interrupted only in places by ancient stalactites and great heaps of prehistoric kitchen refuse. The style of these paintings was the same as that of the prehistoric engravings and carvings already known to science. Some of the painted animals, such as the bison, had disappeared from Europe at the close of the Glacial period. Indeed, there was no doubt as to what they were, and Sautuola did not hesitate to identify them as contemporary with the engravings and small carvings of the reindeer-epoch. The first brief published account of Sautuola's discovery was received by the scientific world with unanimous incredulity. His opponents claimed that so finished an art was impossible without any antecedents, and, as a matter of fact, the Santillana pictures are still the finest of these wall paintings. What made it worse was the fact that Sautuola had already been exploring the cave for the past sixteen years without noticing the pictures. It seemed quite evident that he could only be a dishonest seeker after notoriety, such as is occasionally found among the pretended scholars of second-rate European towns.

Both Sautuola and D. Juan Vilanova, professor of palaeontology at the University of Madrid, and the ardent defender of the authenticity of these paintings, were treated with the utmost scorn by scientific congresses and periodicals. Fortunately, in 1895 a French investigator, Emile Rivière, discovered some incised sketches of a similar character in the caves of La Mouthe, and since that time one find has succeeded another until today more than fifty caves containing wall-paintings confirm the discovery of Sautuola (fig. 38). Like the sculptures, the pictures in these caves reproduce the animals of that period in surprising postures (Plate III). At first, representations of human figures were very scarce and were seen only in some of the caves in Spain, especially in the well known

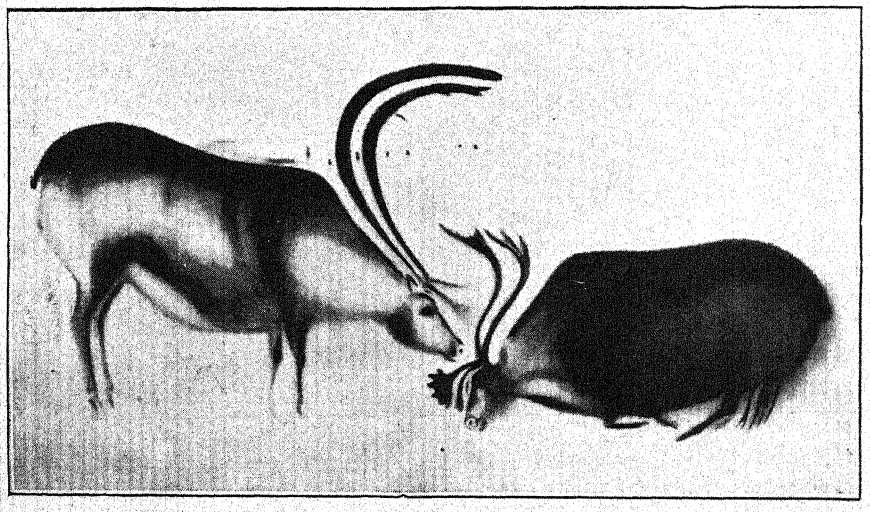


Fig. 38. — Reindeer. Cave at Font de Gaume. *(From Breuil.)*

picture at Cogul discovered in 1907 in the Province of Lérida. This painting reproduces a number of scenes from the life of the hunters of the reindeer in which we see large stags with broad antlers. Some of these hunting scenes are difficult to understand, and it is possible that some of the figures are those of men in disguise. Strangest of all is the dance of nine women around the figure of a man. The women wear a tight fitting tunic or skirt of some sort and a pointed cap or hood upon their heads (Plate IV). On the other side herds of ibex are cleverly sketched very similar to the paintings in other parts of Spain and in southern France. The most valuable of all from the standpoint of the historian is that portion of the Cogul painting in which we see a small figure not unlike a satyr dancing and surrounded by a number of women in pairs. In other caves numerous symbolic figures have been found, both incised and painted. These are usually huts, hands, arrow-heads and things of that sort which probably had some magical significance (fig. 61).

Many features of these prehistoric frescos present problems which are difficult to solve. The pictures are often quite a distance from the mouth of the cave, and at Niaux, for example, it is necessary to go in for a distance of eight hundred and seventy five yards to reach the part of the cave where they are to be found. The discovery of a soapstone lamp, not unlike those of the Esquimos, explained the method of lighting these dark prehistoric sanctuaries, for the smoke from these grease-fed lamps had disappeared in the course of thousands of years of oxidization.

Fig. 39. — Hunting scene. Painting on the wall of the Cueva de los Caballos. ALMERÍA.

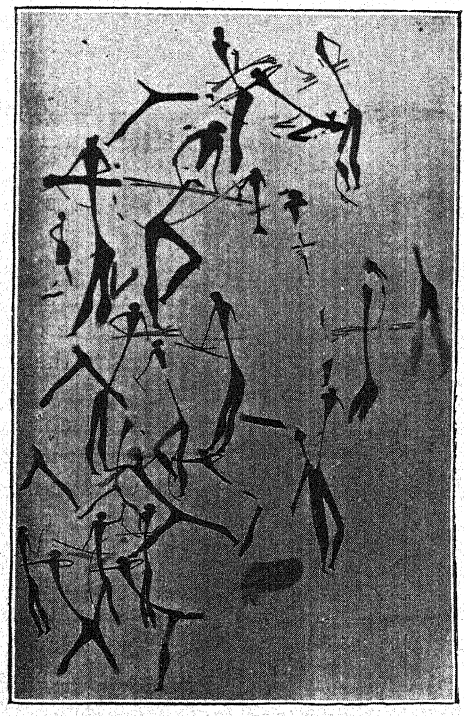


Fig. 40. — Battle scene. Cave of Civil.

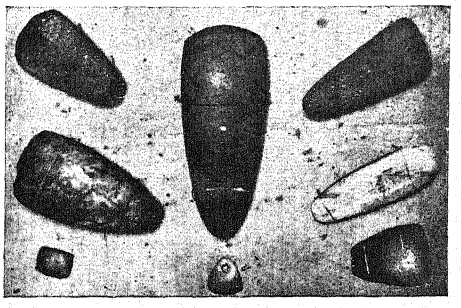


Fig. 41. -- Axes of polished stone (some very small ones were used as amulets).

The symbols we have mentioned, such as huts, hands and arrow-heads, were doubtless made by the hunter who used magic to insure a fortunate outcome to the hunt by wounding an image of the animal to be hunted.

We find a second stage in the development of this cave art in the southeast part of Spain which evidently came after the Glacial period. We are led to conclude that a change of the temperature of Europe coincided with the arrival of other races of men, and that the successors of these Quaternary artists retreated to the south. The paintings of this period are found under overhanging rocks and in caves and represent hunting and battle scenes in which human figures appear in great numbers (figures 39 and 40). Perhaps the most important specimen of this survival of palaeolithic art is the complicated fresco at Alpera with its scores of human figures (Plate IV).

The art of the Neolithic, or new stone age, is characterized by the disappearance of the wonderful talent for painting and sculpture of the older races of hunters. In compensation, however, a taste for monumental works of great monoliths now appears.

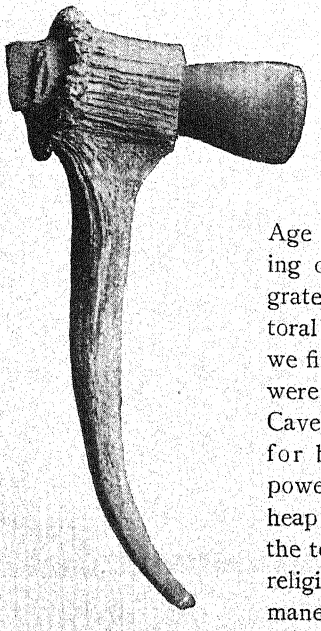
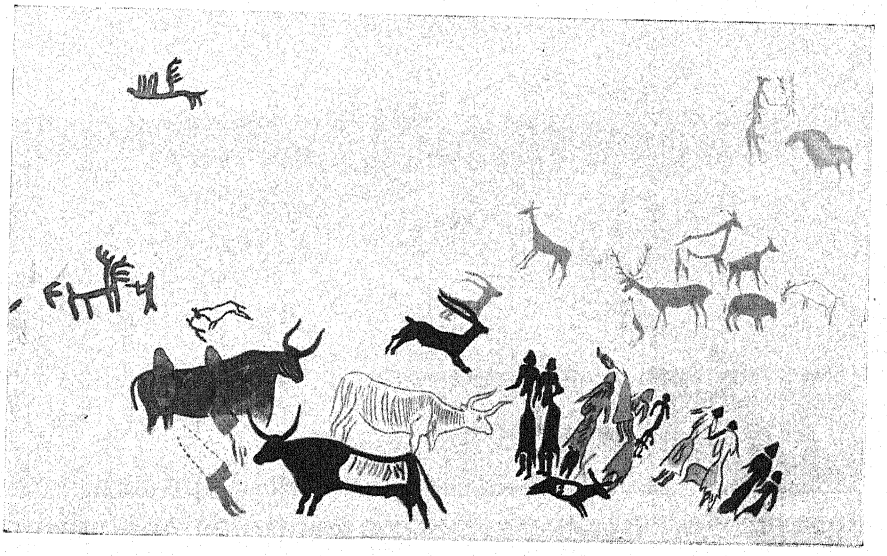


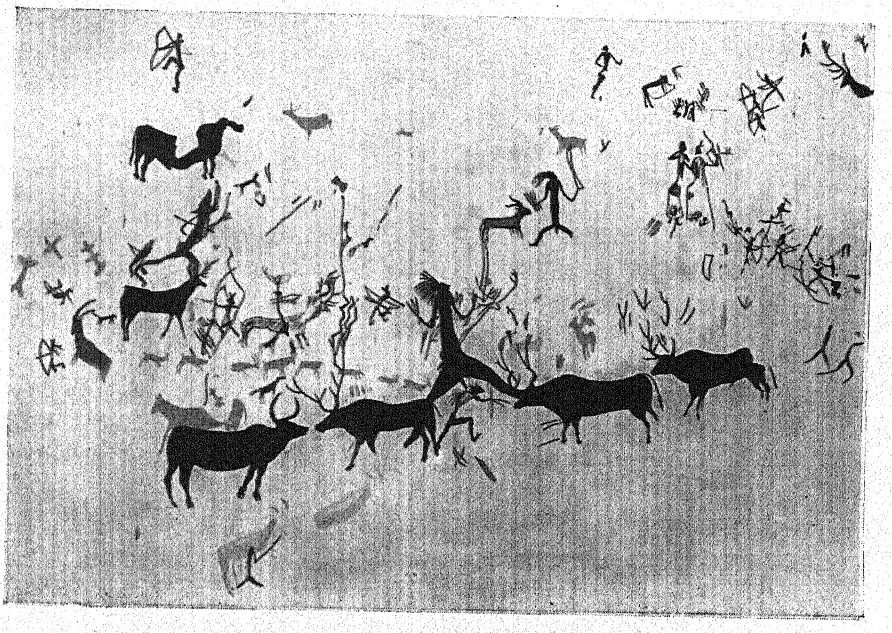
Fig. 42. — Stone axe and handle of deer-horn.

After the last cold wave of the Glacial period, the polar ice-cap slowly receded and the fauna and flora of modern Europe began to appear. So complete a change in living conditions was bound to have a radical effect upon both the intellectual and artistic life of the people. What we might call a prehistoric Middle Age succeeded the Golden Age of sculpture and painting of the reindeer-epoch. The roving hunters emigrated to the south, crowded out by new tribes of pastoral and agricultural peoples. Adjoining the dwellings, we find stables for the herds of domestic animals. Huts were built in compact groups forming a sort of village. Caves were still inhabited, but were more often used for burial purposes. Where there were no caves, a powerful spirit of collectivism inspired the tribes to heap up huge tumuli for burial purposes. The cult of the totem, or protecting animal ancestor, gave way to a religion which had for its object the conciliation of the manes, or spirits of the dead. Great public works were undertaken and Europe was crossed from end to end by long trade routes which were the means of an exten-



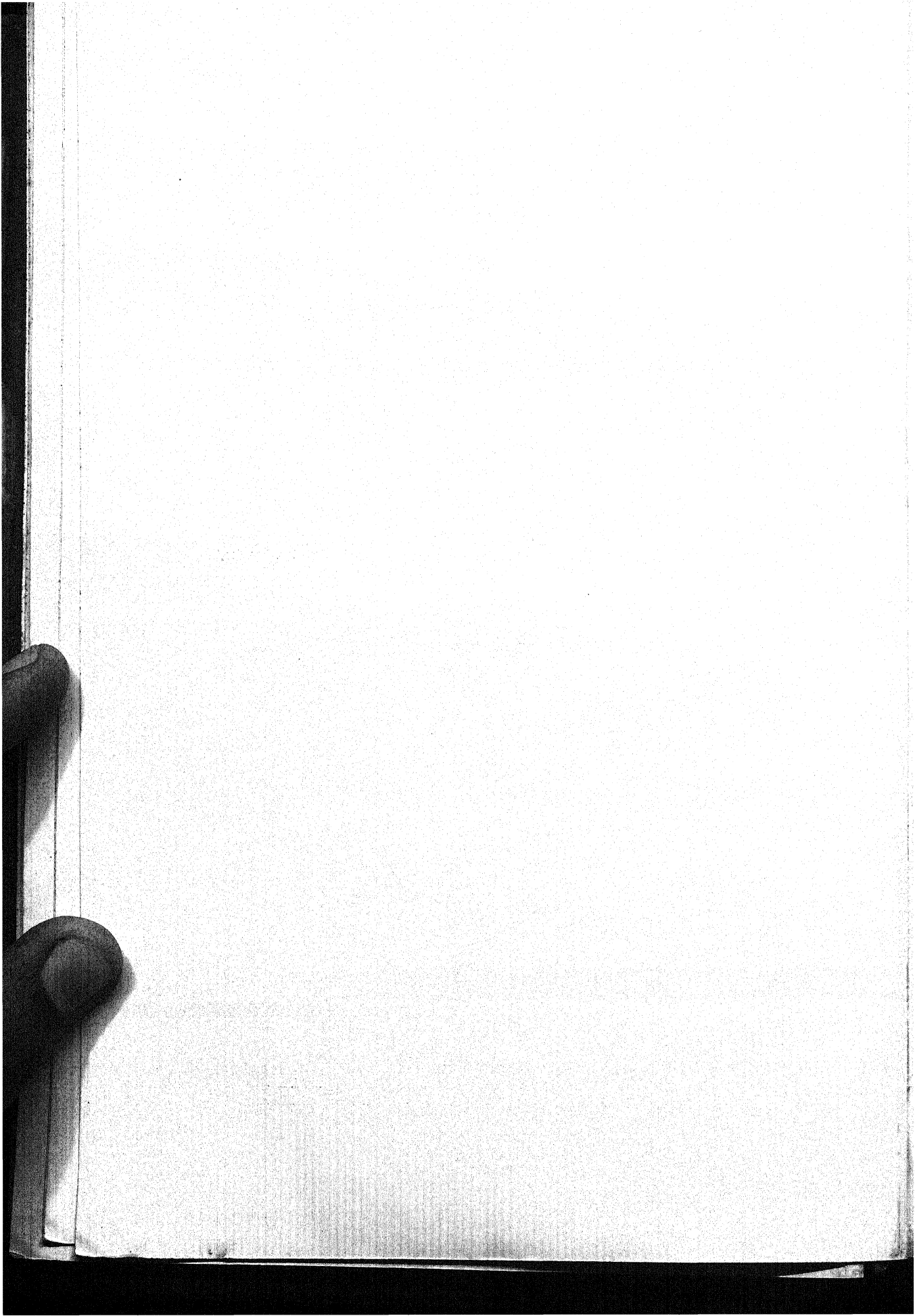
Fresco at Cogul. LÉRIDA. *Spain.*

In the upper left-hand corner we see symbolic signs for the hunt. To the right is a disguised hunter. In the centre are herds of ibex. Below, women are cleaning cattle, and beside them are the nine women dancing about a man.



Fresco at Alpera. ALMERÍA. *Spain.*

To the left are hunting scenes. In the centre is a chief with a feather head-dress.
To the right are women and a battle scene. Below are deer, cattle and a disguised hunter.



sive exchange of both symbols and religious ideas.

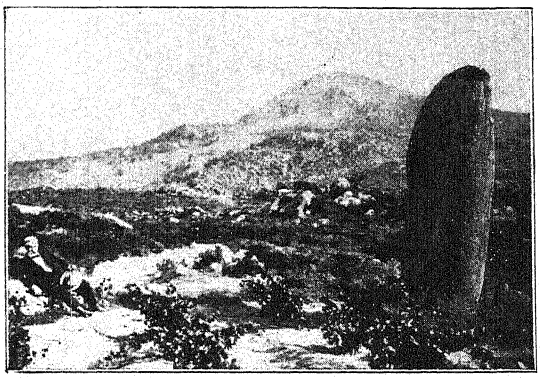


Fig. 43.—Menhir at Vallvenera. GERONA. *Spain.*

The reindeer and mammoth had disappeared, and bone and ivory were no longer to be obtained for the manufacture of useful articles. Chipped stone again came into general use and people learned to smooth and polish many of their stone tools and weapons by a process of abrasion. Instead of the rough flints of a former age, we now find the delicately shaped implements made possible by this new process, the most common of which was the stone axe or celt which was in use down to the Roman period. The stone axe itself became an object of worship. It may be that man deified this instrument in gratitude for the benefits received from it (fig. 41). It was still an object of veneration during the first century of the Christian era, and down to the Roman period tiny axes were used as amulets which preserved the old traditional shape. This axe, or celt, was almost triangular and was set into a wooden or deer-horn handle (fig. 42). Its shape was so religiously conserved that even the earlier copper axes were made in the same form and set into the handle in the same manner. Indeed, the shape of the celt was the form most highly esteemed by primitive man.

This worship of the axe was preserved by certain nations, such as the Gauls, down to the Roman conquest, and the wide-spread extent of this cult is one of the most puzzling problems of the study of primitive man. All over Europe and Asia we find religious reverence paid to stones of this shape, the principal weapon and most useful tool of our ancestors. Through some association of ideas of which we have no knowledge, the worship of the axe became connected with that of the feminine principle. The axe is often found beside the rudely shaped figure of a woman, for, as we have already noted, sculpture and painting greatly deteriorated after the end of the Glacial period and at the beginning of the new stone age. Sometimes the axe is drawn upon the walls of burial caverns or upon rocks, but there is no doubt that the worship of the feminine principle is intended. Strangely enough, the same triangular axe is found among the most widely separated peoples, even those inhabiting distant continents. Except for the label, it is impossible for the visitor to a museum to distinguish the axe or celt of polished stone found in America from one discovered in France or Japan. The same virtues are everywhere ascribed to them; often they are believed to be aerolites, stones fallen from heaven with the lightning, and they are always a charm against sickness, enchantment and disaster from storm. In many parts of the world people ascribe a mysterious origin to these celts turned up by the plow; that they were laboriously shaped by their own ancestors of the stone

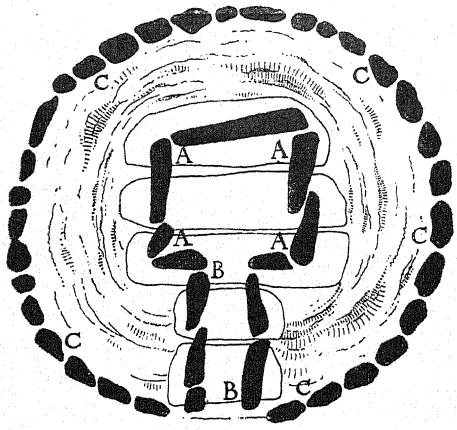


Fig. 44. — Plan of dolmen.

age has been completely forgotten. Deposits of them have been found in tumuli close to human remains, and it is possible that they were used as money, or at least as a medium of exchange.

It has been believed that the solitary monuments which we know under the name of *menhirs* had their origin in stone worship. These tall stones have been erected upon the ground like primitive obelisks. Excavations have shown them to be deeply embedded in the ground, but nothing has cast any light upon the use of these huge monoliths (fig. 43). Some are as tall as certain of the Egyptian obelisks, having a height of sixty-three feet, but, generally, they are of more modest dimensions, being usually from twelve to fifteen feet high. These great stones, scattered along the country roads, are still regarded with much reverence and are associated with many popular stories and legends. They are often considered to be the works of superior beings, such as giants or saints, possibly the work of the devil. Many theories have been advanced to account for their origin; they have been said to mark a frontier, to be dedicated to the sun or to be of phallic origin.

These are all mere conjectures. We do find in the Bible certain records which lead us to believe that they were either votive monuments or else memorials of historical events. It will be recalled that Moses twice orders, in the Pentateuch, the construction of altars of unhewn stone. Jacob had already set up a stone monument in commemoration of the great event of his life upon the very spot where it occurred. In the Book of Joshua, the reference is still more relevant; the children of Israel gathered a number of stones, and, without shaping them, set them up to mark the spot where they crossed the River Jordan, "and these stones shall be for a memorial unto the children of Israel forever". This certainly recalls the alignments of menhirs found in Brittany and the circles of monoliths with other stones in the center, like the famous one at Stonehenge in England (figure 29). There are also alignments of menhirs in Palestine, some of them still erect.

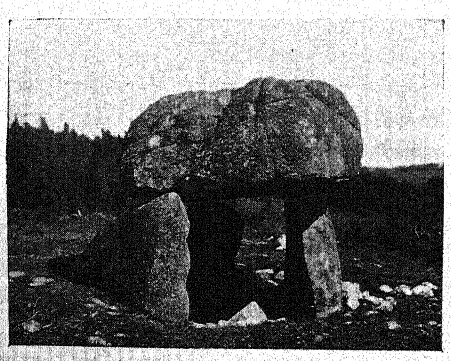


Fig. 45.—Dolmen at Urbe near Crocq-en-Creusse.

Another monument of this period of which we have more precise knowledge is the dolmen. This is a tomb composed of enormous stones which form a rectangular

chamber. In figure 44 we see the stones A-A, which form the walls of the chamber, covered by other flat stones so as to make a roof. A small covered passage B-B leads to the door. The complex is covered by an artificial heap of earth, brought from some distance away. Around the mound the stones C-C were laid in a circle so as to form a sort of retaining wall for the earth of the tumulus. As a matter of fact, the monument has usually been laid bare by action of the rain and many of the outer stones have been carried away, so that there is little left but two or three of the stones which formed the walls and roof of the chamber, arranged so as to resemble a gigantic table (figs. 45 and 46). This resemblance at first led to the belief that they were rude altars for sacrifice, but later it was noted that the stone forming the top of the table had its smooth surface turned downward, and the convex side lay uppermost. It was also observed that the other stones which had formed the walls of the chamber lay close by, and in some cases chamber and passage were entirely preserved. In England, where there are a large number of these megalithic monuments, the entire tumulus was frequently found intact and within it, the skeleton and personal articles used in connection with the burial.

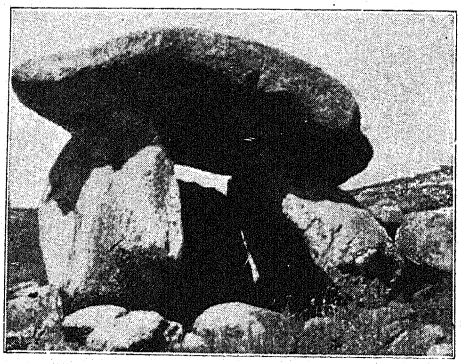


Fig. 46. — Dolmen in Syria.

Among the objects found in the exploration of these dolmens were rudely

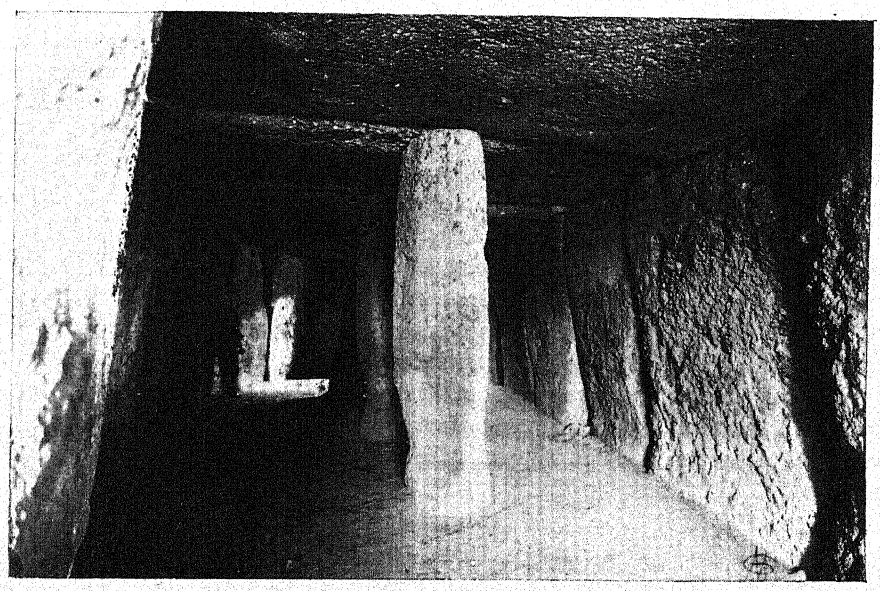


Fig. 47. — Cueva de Menga near Antequera. SPAIN.

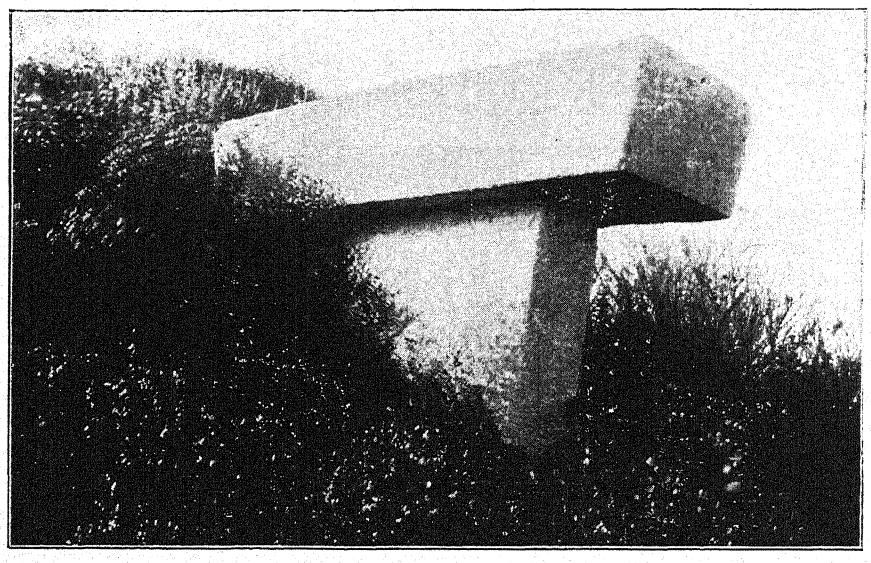


Fig. 48. — *Taula* on the farm of *Torrauba d'en Salort,* about four miles from Mahon. *Minorca.*

decorated pottery vessels such as were unknown to the people of the reindeer-epoch; indeed, it was a moment fraught with important consequences to mankind when the first rude prehistoric vessels were moulded from clay. For a long time they were shaped by hand, for the potters' wheel was as yet unknown, and decorated with zigzag lines made by the fingernail of the potter or by the impression of hempen cords.

This great change in mode of life, evidenced by these new burial customs, the use of polished stone implements, metal and pottery, was plainly the consequence of something more than merely a change of climate in Europe. It may well have been the result of the penetration of another race of people from the east. Some investigators believe it to have been due to a Celtic invasion, such as that mentioned by the Roman writers. These hypotheses regarding the origin of the prehistoric monuments of Europe, were based upon the supposition that they were the work of new emigrants who had a knowledge of building and were in every way more advanced than their predecessors. The monuments themselves were given Celtic or Breton names, because of the Celtic population of Brittany. Menhir, for example, means long stone, and dolmen, stone table, in the Celtic language of Brittany. Nevertheless, this proposed solution is altogether too complete to be entirely correct. Only too often has something for which we cannot account by normal internal development, been explained by a supposed foreign invasion. This supposed Celtic immigration is only another theory of interference by force in European affairs by the more civilized east, and, as usual, the Orient is called upon to explain another obscure problem in European history.

Today we feel that the problem of these megalithic monuments is far from being explained by an opportune foreign invasion. We do not find Europe

PHOTO MAS.

Fig. 49. — *Taula* on the farm of *Talati de Dalt*, about two miles and a half from Mahon. *Minorca*.

inhabited during the Neolithic period by two distinct races living together, one a dominating aristocracy and the other a population of slaves preserving its ancient rites and customs. On the contrary, the area where these dolmens are found is far greater than that was believed possible at first. They are now known to exist in Egypt, India, along the northern coast of Africa, in Syria and along the shores of the Black Sea, and the present state of our knowledge of the subject suggests that this Neolithic culture covered the ancient world more or less uniformly and developed slowly and naturally, laying the foundation for the historic civilizations. These prehistoric monuments are called megalithic, meaning "of huge stones", and the blocks of which they are composed are truly of extraordinary size. The dolmens, or tombs, are often found in groups, and in some places they are so numerous that they are a prominent feature of the landscape. Sometimes the great stones are roughly hewn, and we find pillars in the center of the chamber supporting the great flat rocks which form the roof (fig. 47).

The megalithic monuments are especially prominent on many of the islands of the Mediterranean. In Minorca they usually consist of circular enclosures of large stones with a curious table-shaped structure in the center composed of two large blocks of stone. This may have been the altar of some prehistoric cult (figs. 48 and 49). These tables are called *taulas* by the inhabitants of Minorca; they are always found within an inclosure and are close to other prehistoric monuments called *talayots* and *navetas*.

Fig. 50. — *Talayot* on the farm of Curnia, about three miles from Mahon. *Minorca.*

The *talayots,* or sentinels, have the appearance of towers; they have the form of a truncated cone and there is a door leading into an interior chamber. The thick walls of these *talayots* are constructed of rough stones laid in such a manner as to take advantage of their natural form and only slightly shaped. The name, *talayot,* is derived from the popular belief that they were watch-towers, or perhaps signal-towers.

Another type of megalithic monument found on the Island of Minorca is the so-called *naveta.* It is longer than it is wide and its walls are sloping, not unlike the inverted hull of a ship lying upon the beach. The chamber inside of it appears to have been intended for burial purposes, so it was probably the tomb of a mighty chief or warrior rather than a prehistoric sanctuary (fig. 51).

A large number of these megalithic monuments are often found in the same locality, and they doubtless served a number of purposes, some being dwellings, others, temples, and others, tombs. The *talayots*, with their inner chambers and fortress-like appearance, may have been the fortified dwellings of this primitive Balearic people; often a number are found grouped together like a little village. The *navetas* were probably their monumental tombs, and the enclosures of great stones with their *taulas* seem to have been their temples. Strangely enough, these enclosures are never found near a group of *talayots.* The *navetas* are somewhat scarce, and the talayots, or fortified dwellings, are the most abundant.

We know little, however, as to the period or the true significance of these monuments in the Balearic Islands, but it is of some assistance to compare them with similar monuments found in Sardinia. Here are enormous towers, often in groups of three or more, which are called *nuraghi.* They resemble the *talayots* in the form and use of the stone blocks of which they are composed, as well as

PHOTO MAS

Fig. 51. — *Naveta* on the farm of *d'es Tudons*, about twenty four miles from Mahon. *Minorca.*

in the arrangement of the inner chamber. We need only to compare the Minorcan monument reproduced in figure 50 with the one in Sardinia in figure 52 to see the similarity in form and the slightly polygonal shape of the stones composing them. The same is true of the disposition of the interior room. But recent excavations have revealed the fact that the *nuraghi* date from the bronze age and were the work of a people who had achieved a fairly advanced culture. According to Mackenzie, who thoroughly explored a large number of them, they were dwellings. We actually find cities of *nuraghi* and public works, such as causeways and roads, constructed by the same people who lived in those towers. The tombs are very different. They are lower and are popularly named "the tombs of the giants", so we see that the *nuraghi* was never used for burial purposes.

Professor Taramelli of Cagliari discovered a few years ago a temple of these ancient Sardinians. Near it was a well from which the priests evidently drew water for ritual purposes. In the course of the excavations a number of small bronze images were discovered. One represented a goddess-mother, a sort of prehistoric Demeter, and the other, a warrior with a cape and a large sword suspended from his neck (figs. 53 to 56). Similar bronze figurines had long been known in Sardinia, but it is only recently that they have been identified as contemporary with the great megalitic monuments known as *nuraghi*.

Megalithic monuments of great size are also found in Malta and Pantellaria. These are partly cut out of the native rock and partly constructed of great stones, and they appear to have been temples of some sort. Here we find series of rooms containing altars, or sacrificial tables, as well as niches cut out of the rock to serve some religious purpose (fig. 57).

While the inhabitants of the islands of the Mediterranean were constructing

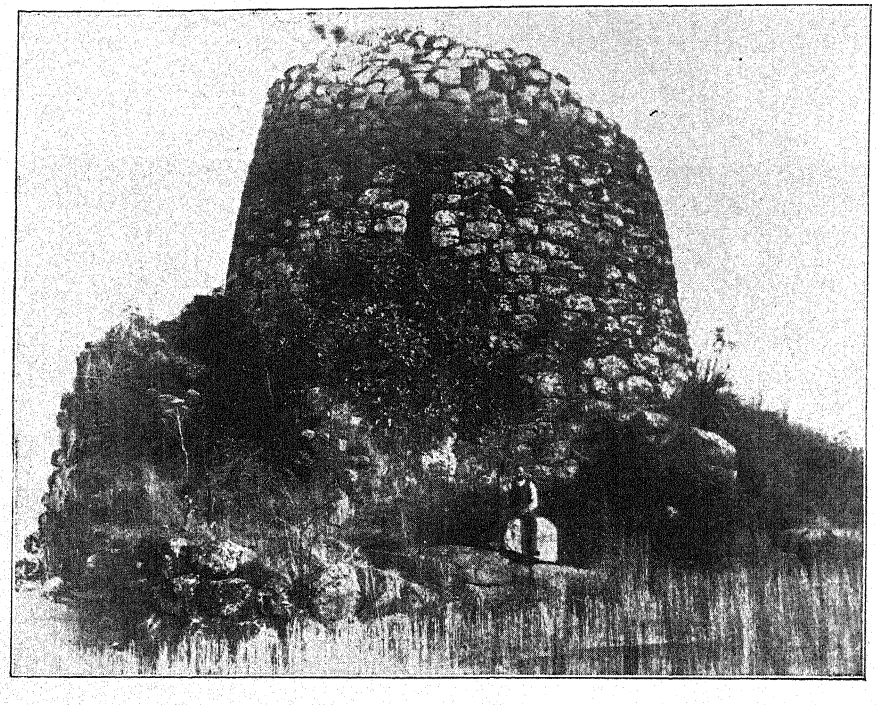


Fig. 52. — Nuraghi of Santa Barbara. SARDINIA.

these massive structures called *talayots* and *nuraghi* and the temples of great stone blocks in Malta, the Neolithic men of northern and central Europe lived in huts, the remains of which are often discovered in the course of excavations for various works. These remains contain ashes and various objects such as celts, pottery etc. They are often found very close to the surface and are distinguished from the surrounding soil by their different color. Sometimes these huts were built over the water, probably for purposes of defense, and in this case they are called palafittes, or pile-dwellings. The houses of the Swiss lake-dwellers were of this sort, and they are also found in the swampy portions of Italy and northern Europe.

European man continued to paint and tatoo himself down to the Roman period. Cæsar writes that the Britons painted their bodies, and Pliny records the fact that the women of these tribes darkened their skins with the juices of certain plants. This custom lasted even longer in eastern Europe. Some very interesting figurines have been found in Roumania which are ornamented with stripes and geometrical patterns similar to the designs tatooed upon the savages of today (fig. 58). Terra-cotta objects have been discovered which seem to be stamps used to print these patterns upon the skin. They are very similar to those used by the Indians of Mexico, Venezuela and Colombia.

During the latter part of the Neolithic period, pottery was decorated with varied geometrical designs consisting of angles, parallel lines, triangles and concentric circles. The development of the textile industry may have stimulated a

Fig. 53.—Sardinian idol. Small bronze statue representing a warrior.

Fig. 54.—Small bronze image of the Sardinian goddess-mother.

Fig. 55.—Nuraghi used as a temple. Mouth of sacred well. SARDINIA.

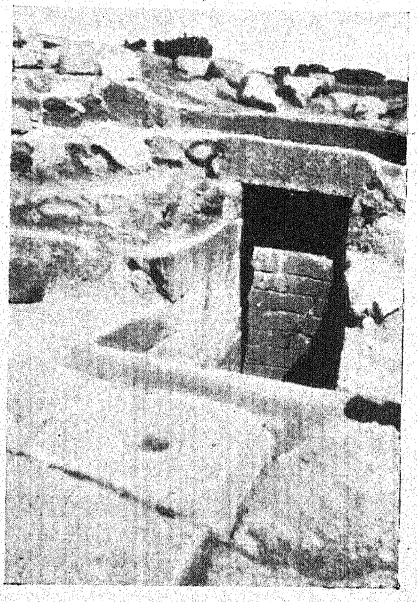


Fig. 56.—Stairway descending to the sacred well of the temple-nuraghi.

Fig. 57. — Interior of prehistoric temple, at Hal Saflieni. MALTA.

taste for these combinations of lines. Numerous fragments of these coarse hempen fabrics have been discovered. Many of them are half carbonized. They were used by the prehistoric lake-dwellers of Switzerland and by other Neolithic peoples of northern Europe and even Spain. The fibre was woven into a great variety of designs, many of them revealing a taste for certain elementary artistic forms. The designs, which were at first composed of straight lines, triangles and squares, were later formed of curves, circles and spirals, but continued to follow almost the same patterns.

All through the Bronze age, this Neolithic culture continued to progress along the same lines, producing a succession of geometrical decorative styles. The weapons and implements of the prehistoric European tribes of the Bronze age were profusely decorated with patterns of interlaced and parallel lines, curves and spirals, finally producing a style called La Tène. It has been so named because the most important remains of this culture were found at a place of this name not far from Neuchatel, Switzerland. This style continued down to Graeco-Roman times.

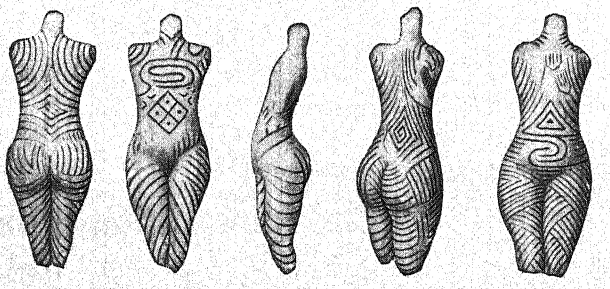


Fig. 58. — Small prehistoric figures showing tatooing. ROUMANIA.

From the most remote period, the progress of the European peoples was exceedingly slow. First they fashioned their stone implements, later they decorated their pottery and bronze weapons, until they finally achieved

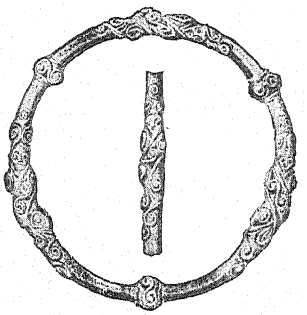


Fig. 59.—Collar or bronze ring.
(British Museum.)

the complicated but exquisite designs of curves and spirals which characterize the art of La Tène (fig. 59). Only rarely do we find the human figure represented in this last decorative style, and even then it is exceedingly conventionalized. Usually circles and spirals are gracefully repeated in a single motive, without ever degenerating into monotony. This western European style appears to have spread to the east. Many objects have been found in Greece which seem to be related to an occidental sun-worship, chariots and bird symbols, and it is thought that they were imported from northern Europe at a very early period. That commercial relations existed between the primitive peoples of Europe and the pre-Hellenic inhabitants of Greece, has been proved beyond question. Among the remains of the earliest Greek culture we find pieces of amber which chemical analysis has shown to have come from the shores of the Baltic. We know that gold and other metals were imported into northern Europe from the south. So it is not difficult to understand how the decorative designs found in early Greek art could have been easily imported from Western Europe.

In Greece itself, however, although the people were for a time influenced by the characteristic geometrical designs of northwestern Europe, they soon abandoned these complicated patterns and began to originate a style all their own, which grew out of copying natural forms and freely reproducing the impressions these made upon the senses, especially those the human figure.

But in northwestern Europe the Celts and Britons continued to develop their own style of design which became richer and richer. Especially beautiful are their enameled brooches and weapons with their spiral patterns and interlaced curves (fig. 60). This is genuine western European art, in contrast to the more natural forms of Graeco-Roman art. As we shall see later, this European geometrical style, after having been strangled for a time by classical influences, again became an important factor, for it had a part in the formation of mediaeval Romanesque art through the agency of the Irish who never abandoned their own style. It is in Ireland that we find the last cultural survivors of the so-called Celtic peoples. Owing to their isolated position, the Irish were practically the only European people who were unaffected by Graeco-Roman influences. The Irish monks exerted a powerful influence upon Carlovingian culture and aroused again a taste for geometric patterns in central Europe. Thus Neolithic art played no small part in the evolution of the decorative designs of the Middle Ages.

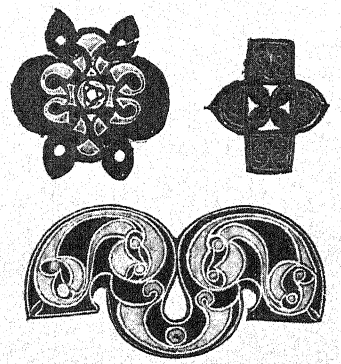


Fig. 60. — Celtic enameled bronzes.
(British Museum.)

Summary. — During the last part of the Glacial period the prehistoric peoples of Europe displayed great artistic talent. Sculpture came before painting and we find remarkable objects carved from the antlers of the reindeer, the most characteristic animal of that period. Cave paintings also offer very lifelike pictures of the animals hunted by prehistoric man. After the ice-cap had receded to the north, the fauna and flora still found in Europe began to appear, and prehistoric man again began to make his implements almost entirely of stone. The use of bronze and pottery came in, and great megalithic monuments were erected of enormous unhewn stones. These are called dolmens and menhirs in northern Europe and *talayots* and nuraghi in the islands of the Mediterranean. Decorative art was of a geometric character, with spirals and complicated designs of curves, and was called La Tène art after the place in Switzerland where great quantities of articles were found decorated in this manner.

Bibliography. — On the art of the reindeer epoch. E. PIETTE: *L'art à l'âge du renne,* 1909. For sculpture and painting, CARTAILHAC ET BREUIL: *La caverne d'Altamira,* 1909. Various monographs by BREUIL: *L'art quaternaire et les travaux de Piette, Les peintures rupestres de Cogul, L'abri du Cap Blanc,* have been published in *L'Anthropologie,* Paris. — On the monuments of the Balearic Islands, CARTAILHAC: *Les monuments megalitiques des iles Baléares.* — On the Sardinian nuraghi, see various articles by Taramelli in *Scavi della antichità,* of the Academia *dei Lincei,* and others by Mackenzie *in Ausonia,* Rome, 1909. — On Stonehenge, see articles in the periodical of the Engineers, Society of London, 1902. Two excellent manuals of prehistoric archæology are, SOPHUS MULLER: *Urgeschichte Europas,* 1905 (there is a French translation), and *Manuel d'Archéologie préhistorique,* Paris, 1905, by DÉCHELLETE. — The following are also practically text-books on this subject: *Guide of the British Museum, Stone Age,* 1902, and *Catalogue des antiquités nationales du Musée de Saint-Germain,* Paris.

Periodicals. — *L'Anthropologie,* Paris; *Bullettino di paletnologia italiana,* Parma; *Man,* London; *Portugalia,* Oporto; *Prähistorische Blätter,* Munich; *Zeitschrift für Ethnologie,* Berlin, and the invaluable publications of the *Junta de ampliación de Estudios* of Madrid.

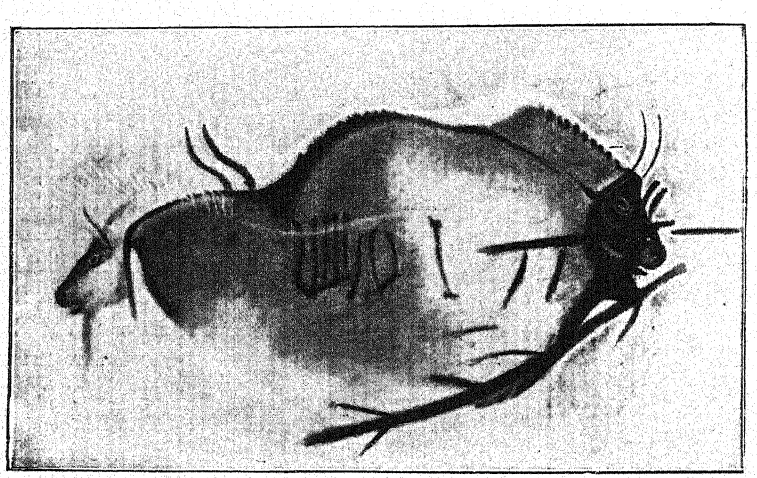


Fig. 61. — Bison with magical symbols, painted in the cave of Marsoulas. *France.*

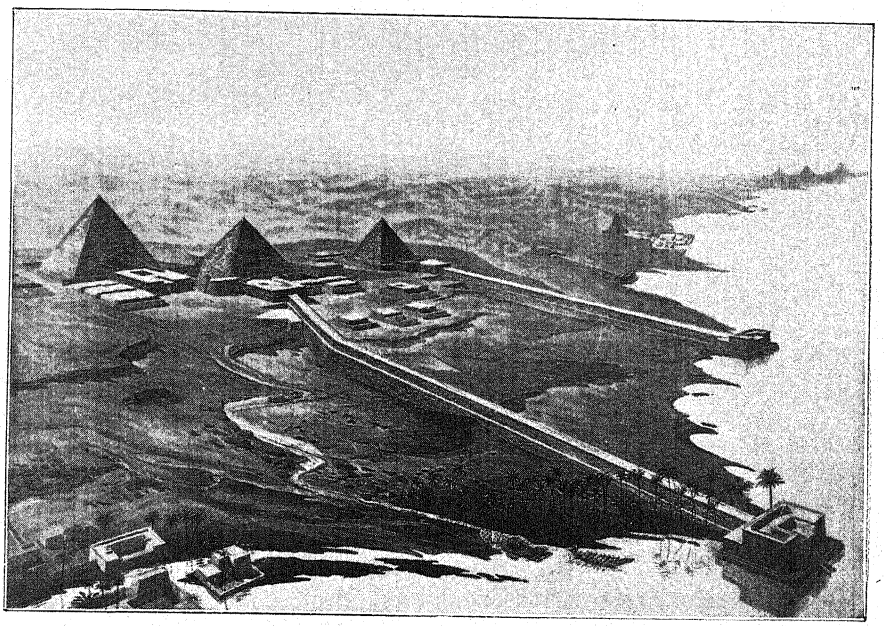


Fig. 62. — Pyramids of Abusir, erected by Nuserre and explored by the German Oriental Society. *(Restored by Borchardt.)*

CHAPTER III

PREDYNASTIC EGYPT. — THE ART OF THE FIRST DYNASTIES

FROM the earliest times Egypt has been looked upon as the venerable mother of all nations. When Plato visited the temples of the Nile valley, the Theban priests, proud of their ancient origin, disdainfully told him that the Greeks were but children in their eyes. Herodotus, the famous traveller and historian, was as enthusiastic an archaeologist as any modern Egyptologist, and returned from Egypt convinced of its great antiquity; indeed, he believed that its gods were the prototypes of the Greek Pantheon. Diodorus says: "The first men originated in Egypt owing to the favorable temperature of that country and the physical properties of the Nile, whose fecund waters brought nourishment to the first human beings who received life." Later, during the Roman Empire, the valley of the Nile was visited with the same enthusiasm which it arouses in the heart of the modern tourist. Senator and courtesan, scientist and emancipated

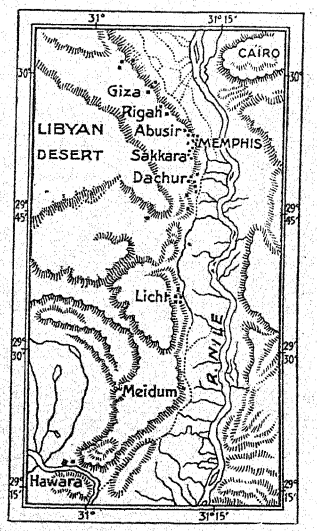


Fig. 63. — Situation of the pyramids in Lower Egypt.

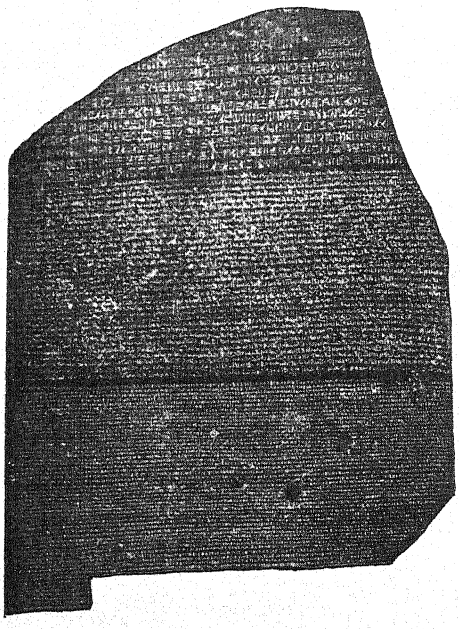


Fig. 64. — The Rosetta stone with its famous trilingual inscription which was the key to the Egyptian hieroglyphics. *(British Museum.)*

young woman (like the American girl of our own times), all were filled with the desire to know this famous country, the cradle of the race. A comfortable sea voyage brought the traveller to the mouth of the Nile, and it was easy to ascend the river to Upper Egypt. The temples at Philae are covered with the scrawled names of the tourists of the Roman period. Writers like Pliny spoke of the pyramids as monuments familiar to everyone, and it was only later that Philo took the trouble to describe them in detail for the benefit of a public which had begun to forget them.

In the Middle Ages, ancient Egypt was known to Europeans only by its pyramids. We have brief descriptions of them by pilgrims on their way to Palestine, as they were obliged to stop at Cairo to obtain the necessary permits to visit the holy places. Arabs, inspired both by curiosity and cupidity, broke into these great monuments which lay in the neighborhood of the capital. They, too, had some knowledge of their antiquity. "All things fear time", says Abdallatif, "but time itself fears the pyramids".

During the Renaissance, Egypt was as little known as Greece. Only the obelisks and sculptures which the Romans had taken from the ancient monuments and brought to Rome were known. The learned men of the time wondered at these porphyry statues and obelisks, the polish of such hard rock and their technique and antiquity, but they did not appreciate the charm of Egyptian art. They it was who were responsible for the fiction, unfortunately still believed by many, that the Egyptians were not only the most ancient of peoples, but also the least progressive, entirely lacking in a living, changing style. Winckelmann, the last of this school, maliciously quotes Strabo's epigram: "the Graces were goddesses unknown in Egypt".

Egypt may be said to have been discovered by a French expedition directed by Napoleon at the beginning of the last century. In imitation of Alexander, who was accompanied in his conquest of India by some of the most illustrious naturalists, geographers and historians of his time, the First Consul took with him to Egypt a corps of emminent French scientists, and to their investigations was due the first scientific study of the antiquities of Egypt. A few years later, when the Commission published the first great volumes of its famous *Description de l'Egypte,* Napoleon, to whom the work was dedicated, had become Em-

peror, and these volumes constitute one of the most lasting monuments to the glory of his reign, with splendid plans and engravings by the scientists who accompanied him on his Egyptian campaign.

It was from Napoleon that the French school of Egyptologists derived their rights and traditions. The two Champollions were succeeded by Mariette, who explored the burial sites of Memphis, Sakkarah, the Serapeum and most of the temples of Thebes. Mariette was followed by Maspero and his school.

All this did not prevent a society of private individuals, the Egypt Exploration Fund, organized in London to carry on certain excavations, from collaborating with the French in cases where the personnel and resources of the latter were inadequate for the work in hand. Also German and Italian Institutes and American Universities have kept permanent organizations in the field.

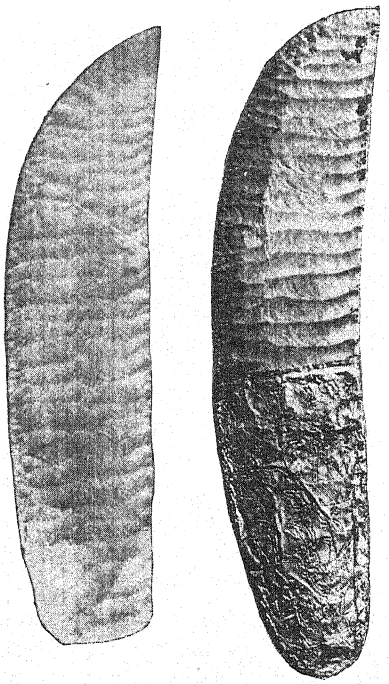


Fig. 65.—Flint knives of the Predynastic Age. One has a sheet gold handle.

It is well known that the hieroglyphics were deciphered by the aid of the Rosetta Stone, a piece of black basalt containing three equivalent inscriptions in Greek, demotic characters and hieroglyphics. Its discovery was followed by a remarkable advance in our knowledge of the history and antiquities of Egypt. The chronology of the various dynasties has been almost completely established, and the reading of the inscriptions and papyri no longer offers insuperable difficulties. New texts are constantly being published; indeed, the scientific printing establishments now make use of movable hieroglyphic type, and texts and translations of the sacred and literary works dating from the most remote dynasties are now made available to scholars all over the world. Difficult as ancient Egyptian society is for us to understand, with its gods, funeral barges and strange moral concepts, nevertheless it is gradually being reconstructed. Some of its spirit will again become part of the heritage of mankind and we shall be the richer for its ideas, just as we now are for the Greek and Oriental culture which we have already assimilated.

Perhaps the most stirring discovery of modern archaeology was that of the beginnings of the art of that ancient nation which had already developed a mature culture at a time when the Greeks and other Mediterranean peoples were still lost in the mists of antiquity.

It is only recently that scholars had any knowledge of monuments more ancient than the pyramids of the Fourth Dynasty, which dated from the fourth millenium B.C. By this time, Egypt had already produced a highly perfected

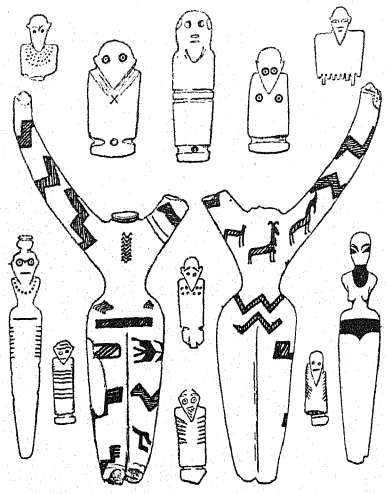


Fig. 66. — Prehistoric clay figurines showing tattooing.

monumental type and developed a line of thought all her own as well as a definite architectural style and a national art. This seemed the more reasonable, since nothing was known of any trial essays in the evolution of so simple and precise a monument as the pyramid. Egyptian art had, apparently, sprung like Minerva, full armed from the brain of Jupiter.

Archaeologists were so completely convinced that nothing had existed in Egypt prior to the construction of the pyramids, that the possibility of a Stone Age in Egypt was roundly denied. How far back, then, did Egyptian history extend before the times of the Pharaohs? Had this exceptional people never passed through the vicissitudes of an Age of Stone, and had this ancient empire no prehistoric predecessor? Nevertheless, the problem of the origin of Egyptian art has never ceased to provoke acrimonious discussion ever since Arcelin exhibited to an archaeological congress the first flint implements discovered in the Nile valley. Mariette flatly denied the evidence, believing that it detracted from the marvellous character of this ancient culture, and said: "The ancient Egyptians were all agreed that their art had no infancy. Their most ancient monuments and other artistic remains display a highly developed civilization. When the Egyptians established themselves in the Nile valley, they had already reached the apogee of their civilization. Stone implements, therefore, cannot be ascribed to them; in any case they could only have belonged to the Pharaonic period, for, according to Herodotus, the Egyptian priests used flint implements to prepare the mummies for burial and as surgical instruments." The protagonists of the prehistoric theory naturally replied that the use of chipped flints in connection with the preparation of mummies for burial or for other religious purposes, among which surgery was

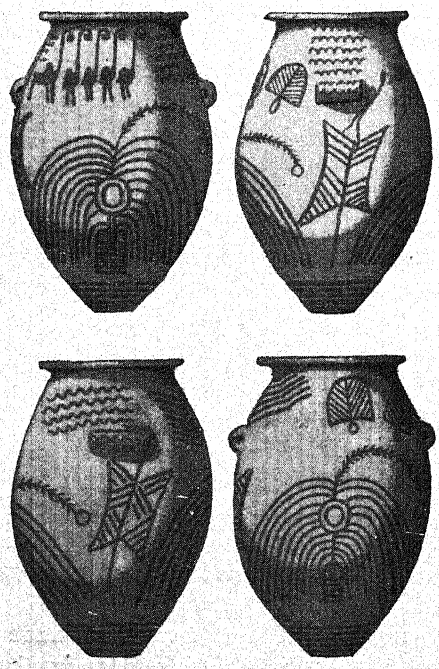


Fig. 67. — Predynastic pottery.

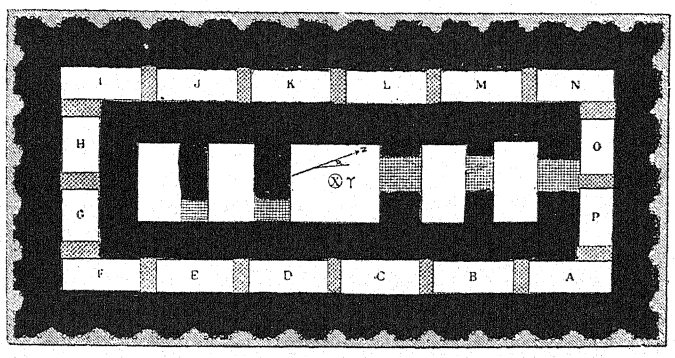


Fig. 68. — Plan of the so-called tomb of Menes, the first Pharaoh.

then numbered, clearly demonstrated that there had been a time when stone was the only material in use, for it is always in ceremonial usages that ancient customs are perpetuated the longest. The employment of flint tools for religious uses, therefore, was the survival of a prehistoric past which had been preserved in spite of subsequent changes in mode of life and industrial progress (fig. 65).

Now, of course, every new discovery relating to prehistoric Egypt is followed with interest and enthusiasm, for it supplies us with additional material for the chronological coordination of the history of mankind at a very remote period. Elsewhere in the world we have only the geological conditions upon which to base our conjectures regarding the age of the Neolithic remains, and geology expressed in terms of years is a most uncertain matter. But Egypt seems to be a very real connecting link between historic and prehistoric times. We see, therefore, that before the pyramids were built, at least four milleniums before the Christian era, some of the inhabitants of the Mediterranean basin had made sufficient progress to be already on the threshold of a new and superior civilization.

Prior to the arrival of certain foreign conquerors who probably came from the south, the ancient inhabitants of the Nile valley went about nude, tattooed and painted, as did most of the Neolithic European peoples for that matter (fig. 66). This method of personal adornment was long preserved among the lower classes, also the custom of accentuating the lines of the eye-brows and eye-lids with perfumed kohl, as we see from the frescoes in the temples of the Pharaohs. Capart had published reproductions of prehistoric engravings and paintings which he found among the rocks and caves of Upper Egypt, and these are another expression of the art of the earliest inhabitants of the country. Dolmens have also been discovered in Nubia which are very similar to those found in Europe. Ordinary pottery was not usually decorated,

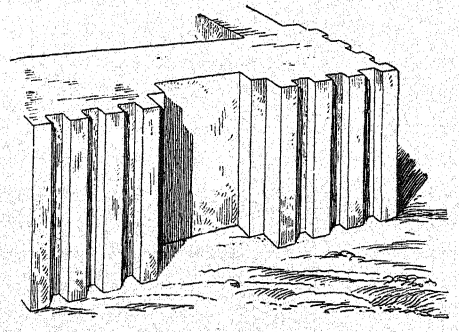


Fig. 69. — Striated decoration on the outside of the tomb of Menes at Negadah.

Fig. 70. — Carved slate palette from the predynastic period.

although sometimes it was painted two colors. The bottom was then painted a brilliant red, polished with stone and ornamented with birds, boats and wild animals between wavy lines (fig. 67). We see in these vase paintings many of the details of the primitive inhabitants of Egypt, as well as of the fauna and flora of the islands and marshes of the great river which still changes its bed from time to time.

The primitive Egyptians lived in huts of beaten clay with no other openings but the doors. Only the wealthier inhabitants built their homes large enough to require one or two pillars to support the beams. The household furnishings consisted of rude pottery, flint knives and scrapers and flat stones for grinding corn, two or three chests and mats of woven straw. Long before the dawn of history the Egyptians had been taught the use of metals by the invaders, and the ancient implements were preserved only by the nobility and priesthood as emblems of authority or as ceremonial objects.

It is to these foreign conquerors that we must concede the honor of having established the civil organization and civilization of Egypt. These people were at first separated into independent tribes, and traces of these petty states are still to be seen in the famous nomes, or administrative divisions which extended along the Nile. Little by little, these small principalities were absorbed into the two kingdoms of Upper and Lower Egypt. The two states were united under the first Pharaoh, who was called Menes. He established a capital at Memphis and became the founder of the First Dynasty. He appears in history as a great ruler of the type which afterward became so famous. He was a legislator, soldier and builder; he it was who constructed the legendary national temple of Ptah, of which no trace remains today. Menes and his immediate successors were only more or less legendary figures until recently, and the stories of the first dynasties were believed to have been pure inventions of the royal genealogists. Excavations, however, have laid bare monuments of this period, the existence of which had not been suspected, and today we have a considerable accumulation of material for the study of early Egypt from the time of the scattered tribes and the occupation of the eastern invaders down to the mighty dynasties who constructed the pyramids. De Morgan discovered what he believed to be the tomb of Menes near Negadah, and he and other explorers have explored similar tombs of the monarchs and high dignitaries of the first dynasties before the pyramids were built.

The dual character of predynastic Egypt is constantly seen in the tombs. While the primitive inhabitants of the Nile valley buried their dead in the ground in circular pits, the conquerors constructed brick hypogea which plainly bear evidence of funeral rites of a very different character. The so-called tomb of Menes, for example, which was discovered by de Morgan near Negadah (fig. 68), had contained a temporary structure which had been burned together with the corpse and the articles buried with it such as vases, food, etc. After the first tomb had been converted into a great funeral pyre, the ashes were enclosed within a new structure, the exterior of which was ornamented with vertical channels (fig. 69), not unlike those decorating the buildings of the earliest Chaldean rulers. This striated ornamentation of the royal tomb near Negadah, however, is not sufficient to indicate the origin of the conquerors of Egypt, who were evidently the dominant race during predynastic times. Between the central chamber and the outer walls of the tomb of Menes there is a series of rooms, A, B, C... in which the personal possessions of the deceased were deposited. Among these were found vases covered with primitive hieroglyphics which are unlike those of the early Chaldeans. Most important of all were the slate palettes ornamented with reliefs resembling those discovered at the mouth of the Euphrates. Palettes characteristic of the predynastic period have been found in many parts of the Nile, and scholars are inclined to consider them of great historical importance. On the one reproduced in figure 70, the lion may well represent the ruler of the principality of that name, and his warriors, the crows, are fighting the nude African aborigines.

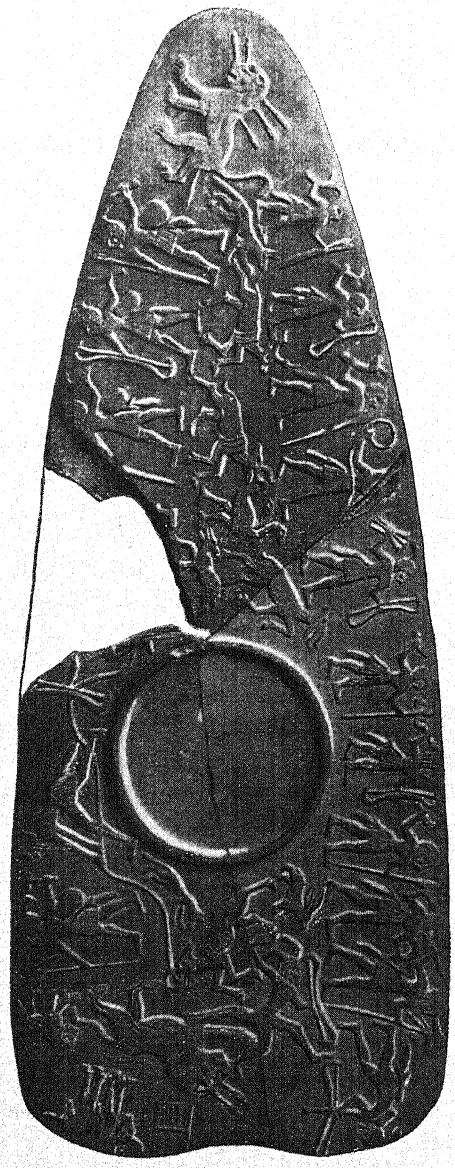


Fig. 71.—Slate palette ornamented with reliefs dating from the predynastic period.

On another palette, which is in a better state of preservation, we

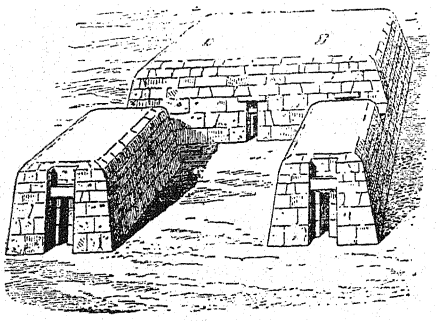


Fig. 72.—Group of mastabas. *(Perrot and Chipiez.)*

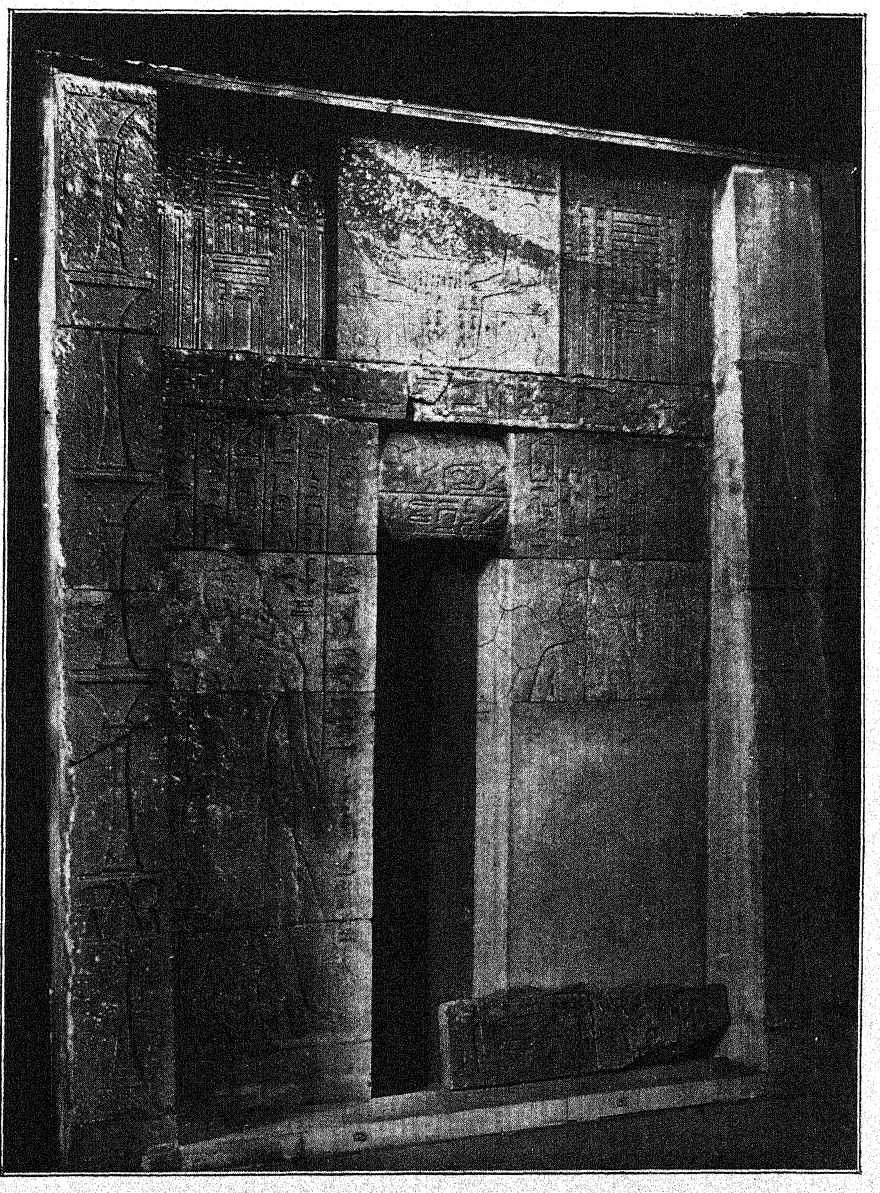
see rows of triumphant warriors, while the lion twice appears at bay and is wounded by a number of arrows in one place, while in the other he retires from the fray pierced by six darts. The allies of the lion also fall defeated. These are crows, ibis, foxes, deer, and a hare. Sometimes we see on these slate palettes a number of animals imprisoned, each within a battlemented wall. Egyptologists believe that these animals represent the different tribes among which the country was divided. The lion appears to represent the head of this coalition who centralized the government in one capital. These symbolic animals were probably the protecting spirits of the different tribes as well as emblems, and they continued to be worshipped during the times of the Pharaohs. Each city had a favorite animal among its gods.

The original inhabitants of the Nile valley preserved many of their old customs under the rule of the Pharaohs. In the palette in figure 71 we see the round head-dresses, the false beards similar to those of the kings of the earlier dynasties and the short garments so characteristic of the Egyptians. The weapons of the warriors in this relief are most unusual. They have bows and arrows, and war-clubs hang from their waists. A two-bitted battle-axe with a long handle is used and also a lasso which is dexterously thrown over the horns of a stag.

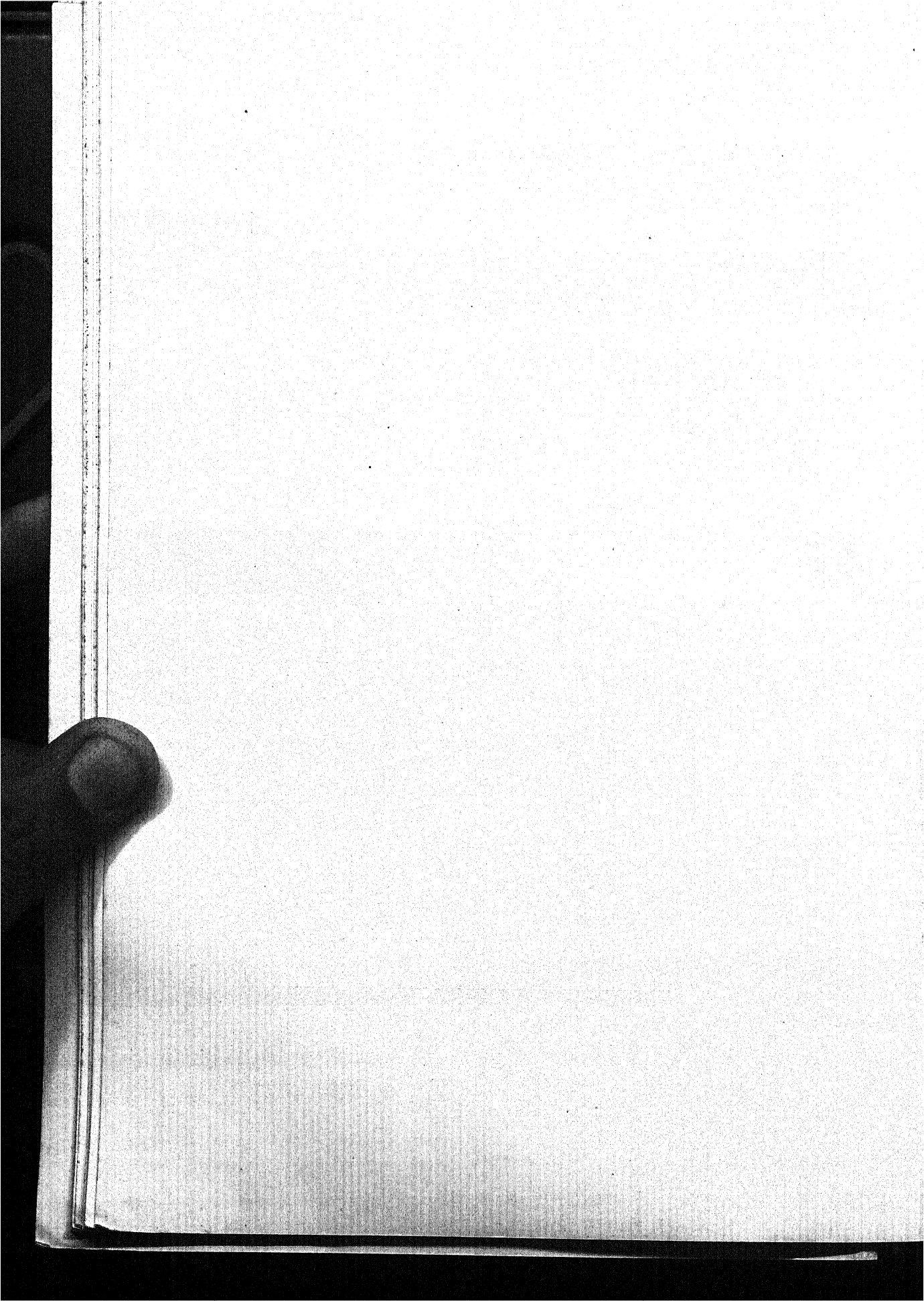
Under the first dynasties Egypt was still the melting-pot of these two races. For a time the country vacillated between the ideas of the populace and those of the ruling caste, but under the Third Dynasty Egyptian conceptions of death and the necessary funeral rites had already crystalized into the forms which prevailed down to the Roman period. The corpse was no longer burned so that it might pass directly into the future world, but it was felt necessary to preserve it from physical decay. The mummy was then concealed. The likeness of the deceased was preserved in sculptures or paintings so that the effigy might survive in case the remains should crumble to dust.

During the time that the capital was at Memphis, Egyptian sepulchres were of two types, the ordinary tombs for the nobles, called *mastabas,* and the royal tombs which were pyramidal.

Explorations made by Mariette in the sandy terrace extending along the right bank of the Nile in the vicinity of Memphis have laid bare what is probably the most important necropolis of the capital of Lower Egypt. The general appearance of this city of the dead had attracted the attention of the French archaeological commission which accompanied Napoleon's expedition. "Up to the very base of the great pyramids a large number of rectangular and almost oblong structures were seen buried in the sand. These were perfectly oriented." These structures were the *mastabas,* named from the Egyptian word meaning terrace or bench. As a matter of fact they do have the shape of an Egyptian



Doorway of a mastaba. *(British Museum.)*



bench (fig. 72). The exploration of the mastabas of the necropolis near Memphis has furnished the most important material we have for the study of the earlier dynasties. This type of tomb is intrinsically an important structural form. Its regular shape and the rooms for different purposes render it superior to the brick tombs used for cremation such as that of Menes near Negadah. The mastaba continued to be a tomb of the chambered type; just within the door was a chapel-chamber on the walls of which were painted scenes from the life of the deceased, and beside it was a small chamber containing a statue of the deceased to which his "ka" or double might attach itself. The "ka" was a certain vital force animating the body, but it was not the soul. In a rock-hewn burial-chamber far beneath the superstructure was the mummy itself. Sometimes this secret chamber containing the sarcophagus was reached by a shaft from the top of the mastaba; it was then filled to the top with sand and gravel to insure the undisturbed repose of the dead. (Plate V.)

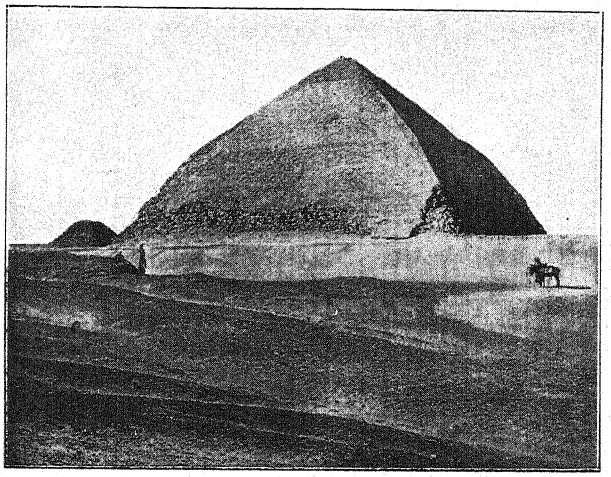


Fig. 73. — Pyramid with double slope.

This prevented violation of the tomb, although immortality was secured by the numerous statues and figures which assured the perpetual existence of the double. In the museum at Cairo they still perpetuate the existence of the departed, though hardly in the manner that was originally

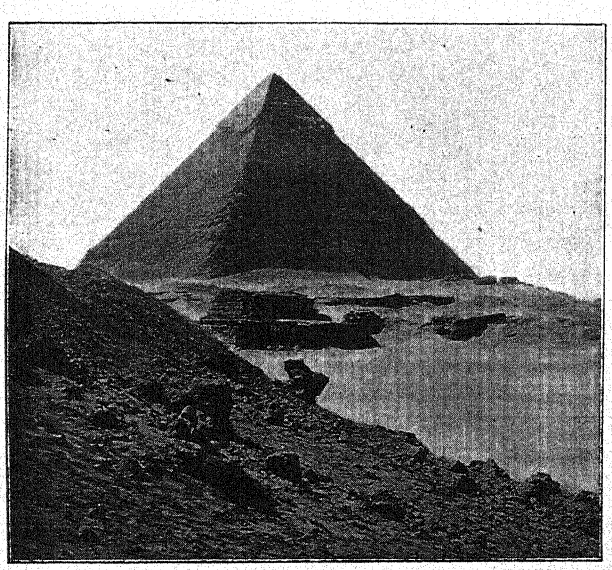


Fig. 74. — Pyramid of Mencheres, or Mycerinus, with remains of its casing.

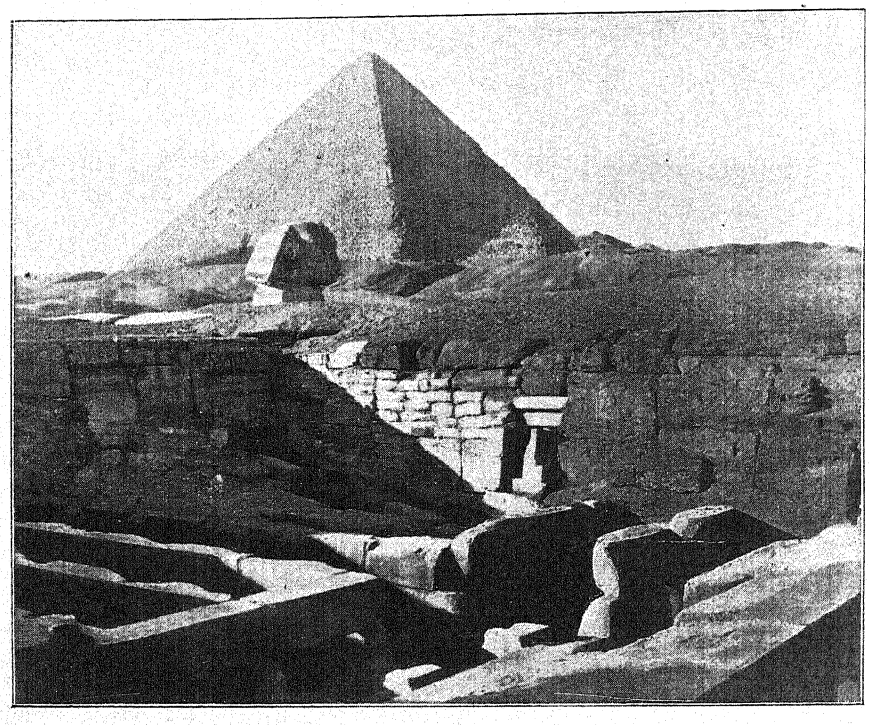


Fig. 75. — Remains of the so-called Temple of the Sphinx in the necropolis of Memphis.

intended, for the ancient nobles, priests and military leaders contemporary with the pyramid builders still live, in an artistic sense at least, in these pictures and statues. The entire population of the old capital was laid away in this necropolis at Memphis; the poor were buried in the sand, mummy piled upon mummy, the nobles in their mastabas and the Pharaohs in their pyramids.

The pyramids are really royal tombs though many of them have long been despoiled of the mummies which they contained. There are a number of them in the necropolis at Memphis; the most famous are the three built by the Pharaohs whom the Greeks called Cheops, Chefren and Mencheres. The two larger pyramids were violated in ancient times and again by the Arabs, but the third was found intact and still contained the mummy in its wooden coffin and porphyry sarcophagus. There is no longer any doubt as to the purely funeral character of these monuments, and the speculations as to whether they were astronomical observatories or served to confine the overflow of the Nile have proved entirely unfounded.

Pyramids are found only in the geographical division comprised by Lower Egypt and mostly in the neighborhood of the ancient capital. After the seat of government was moved to Thebes, a number were constructed there, but the custom of excavating royal tombs from the native rock was soon adopted. The pyramids are, therefore, the tombs of the rulers of the Old Kingdom only, and they do not always preserve the well known shape of the three great pyramids

near Memphis. Sometimes they are terraced, thus constituting a traditional form between the mastaba and the typical pyramid, and sometimes we find them with a double slope (fig. 73). There are pyramids of brick as well as stone. Herodotus mentions having seen pyramids crowned with a seated statue of a Pharaoh, and he believed the pyramid of Cheops to have been surmounted by a similar figure which had been destroyed prior to his visit. In this he was probably mistaken, for the pyramids show no signs of ever having borne figures of any sort. Indeed, their shape was hardly suitable for this purpose. Some of them, like the pyramid of Mencheres, still preserve remains of the handsome casing of hard stone blocks (fig. 74). It is probable that the different courses of this casing formed bands of various colors, according to Pliny's supposition, and that the stone crowning the structure was gilded like the pyramidion which capped the obelisks in later times. The passage leading to the burial chamber of the pyramid was constructed of carefully fitted blocks of stone and was sometimes vaulted. A number of horizontal stones were set in such a manner that they supported the enormous weight resting upon the roof.

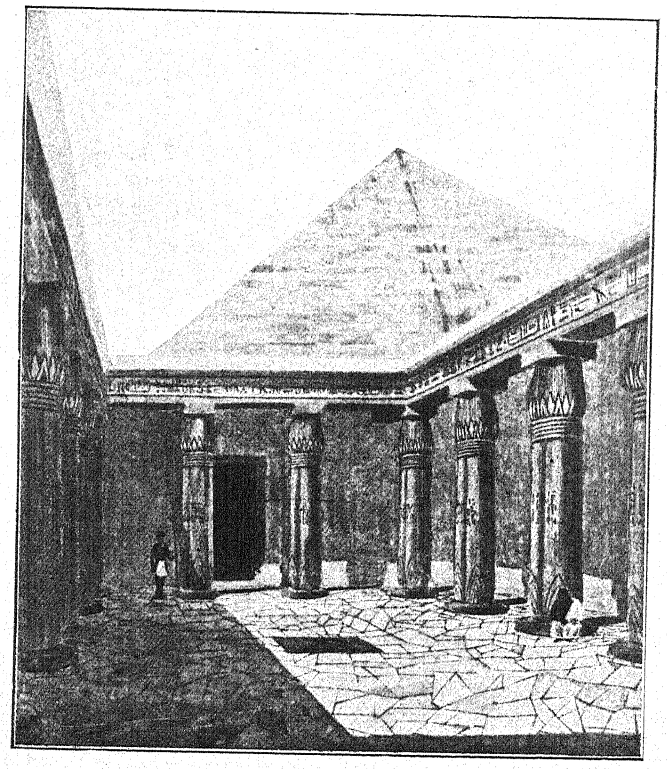


Fig. 76. — Royal temple connected with one of the pyramids of Abusir. *(Restoration by Borchardt.)*

The pyramids were the first of the great national monuments of Egypt. Accustomed as we are to the marvels of modern times, we are still amazed at their gigantic size and the engineering problems overcome in their construction. Thus at the very threshold of history, we see the Egyptians proudly marching forth to win immortal fame for their rulers in that long and narrow strip of fertile land lying between two forbidding deserts.

We readily see that both the mastabas and the pyramids were the typical tombs of the first dynasties. We find in both the same chamber at the end of a

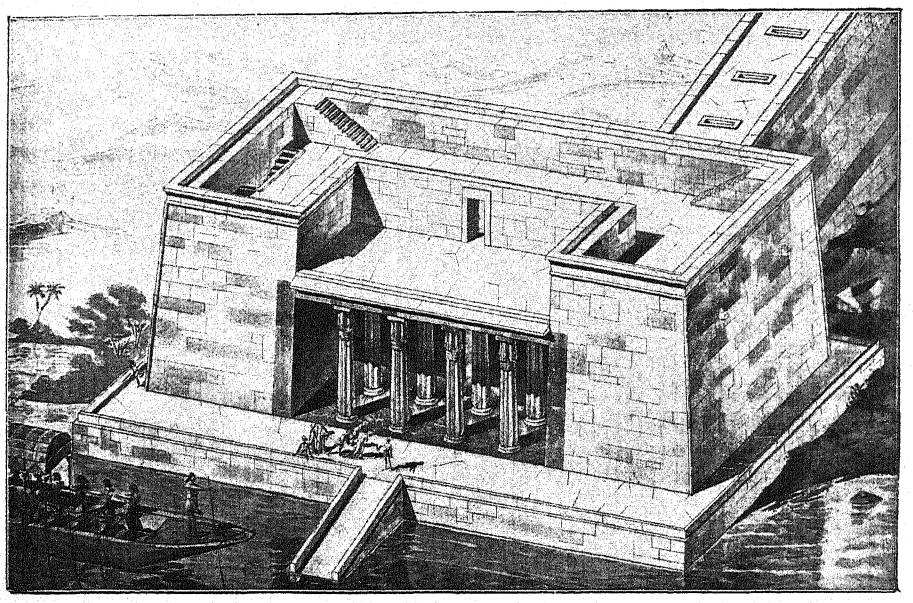


Fig. 77. – Royal temple connected with the pyramids of Abusir. *(Restoration by Borchardt.)*

passage, buried beneath a ponderous mass of masonry. Egyptologists are inclined to attribute both types to the same requirements. The pyramid would be simply a gigantic mastaba, its walls more slanting and continuing to a point. Its burial chamber is also hewn out of the native rock beneath the monument and the approach to it is hidden and blocked so far as is humanly possible.

The principal difference is that the mastaba has an upper chamber, the dwelling-place of the "double", where painted and sculptured representations of the deceased were located, but we find a development of the same idea in the pyramid also.

Mariette explored an archaic structure in the necropolis of Memphis to which he gave the name of the Temple of the Sphinx. It was thought to be a temple contemporary with the pyramids, built under the first dynasties, but independent of the royal tombs (fig. 75). It was set beside the great sphinx from which it took its name and was constructed of large granite slabs which were more or less uniform. The smooth surfaces of the enormous monoliths of which it was composed were not decorated by either mouldings or carved ornamentation of any sort. The roof was supported by columns dividing it into a number of aisles, and at the bottom of a pit found at one end Mariette discovered a number of mutilated statues of the builder of the great pyramid, Cheops himself, whose memory was so hated by the Egyptians in the time of Herodotus. The famous explorer did not connect the temple with the pyramid of Cheops, nor did he connect the multilated statues with the legend which associated the construction of the great pyramid with a period of untold oppression and tyranny followed by serious popular revolts. Today, however, Egyptologists

are convinced that the so-called Temple of the Sphinx served as a gateway to the causeway and the pyramid enclosure above and corresponded to the upper chamber of the mastabas, the dwelling-place of the "double". All the pyramids possess this complementary element, for in addition to the tumulus with its crypt, that is, the pyramid itself, there had to be a second sepulchre at its base, the abode of the "ka" containing the statues of the departed ruler. A third element has been identified in these monumental compositions. This is the temple for the popular worship of the king who was deified after death. This, too, is entirely in keeping with the religious nature of his office.

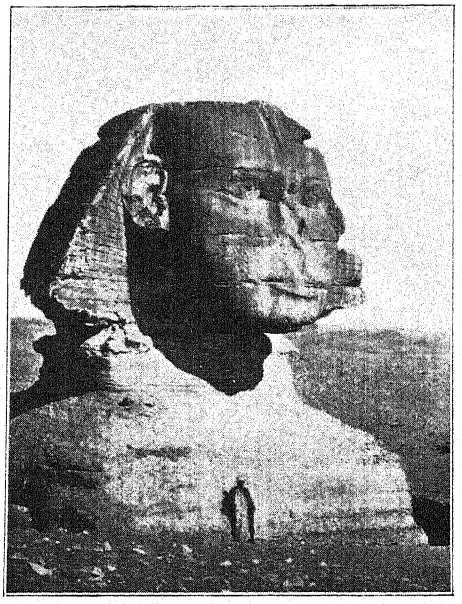


Fig. 78. — Sphinx at Memphis.

At present the theory of the composition of the monumental system connected with the burial of the kings of the first dynasties is as follows: first the tumulus containing the sarcophagus, that is, the pyramid with its burial chamber which recalls the ancient dolmens; second the outer tomb, the dwelling-place of the "ka", in which the sculptural representation of the deceased was placed as in the mastabas; third the temple for the worship of the deified king. The last was usually some distance away and connected with the pyramid by a monumental avenue which the Greeks called a *dromos*. A complete royal sepulchre near Abusir containing all three elements was explored before the war by German archaeologists, and we see in figure 62 a general view of the entire system as it appeared in ancient times: the pyramids with the temples at their bases for the "ka" and the second temple near the river for the populace (figs. 76 and 77).

Fig. 79. — Statue of Chefren.

As far as the religious monuments of the Egyptians are concerned, until lately only the colossal figure of the sphinx was known, a lion's body with a human head, near the pyramids at Memphis (fig. 78).

Fig. 80.—Priest of Memphis.

It was partly carved from a limestone rock emerging from the surrounding plain and completed with great blocks of stone, but the desert sand drifted over the body, entirely covering the temple which had been constructed during the Roman period at the breast of the monster. A stela near the pyramids bears an inscription telling us that Cheops, the builder of the greatest of the three, restored the sphinx. Surely this is an indication of the great veneration in which it was held. The true significance of this figure is still unknown. At first it was believed to have been dedicated to Harmachis, or the rising sun, because it faces the east, but it now seems more probable that it represents one of the early kings of Egypt, possibly the Lion King whom we see in the reliefs on the slate palettes. The cloth headdress is the same as that worn by the kings of the first dynasties (fig. 79).

The most striking monument of this period is the sculptured group of Mencheres and his wife. This was discovered in 1910 by an American expedition sent out by the Museum of Boston to excavate the temple belonging to the pyramid built by Mencheres. (Plate VI.) The monarch stands in a priestly attitude, but the likeness is evidently a remarkably good one. His consort leans toward him, proud of his protection.

Besides the sphinx, the temples lying adjacent to the pyramids are now considered to be religious monuments also. In a certain sense they are the prototypes of the great Theban temples of the later dynasties. The early Egyptians worshipped the spirits of the dead, and their temples were largely devoted to the cult of the great dead, the Pharaohs. The temples at the foot of the pyramids consist of an outer court, a hall for the devotions of the priest who had charge of the temple and an apartment reserved for the god himself into which only the direct heirs of the ruler were allowed to enter. The temples for the populace, which were farther away from the pyramid in the valley, also had a hall supported by columns. In all these temples of the Old Kingdom we find the characteristic elements which we shall see later in the great temples of Thebes. In the temples of the pyramids of Abusir the columns represent lotus stalks and the capitals form the buds. Other columns resemble bundles of papyri or palms, and the bases of the columns are always small.

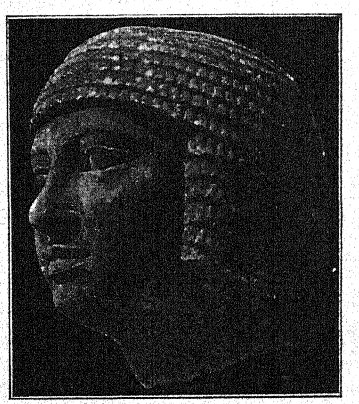
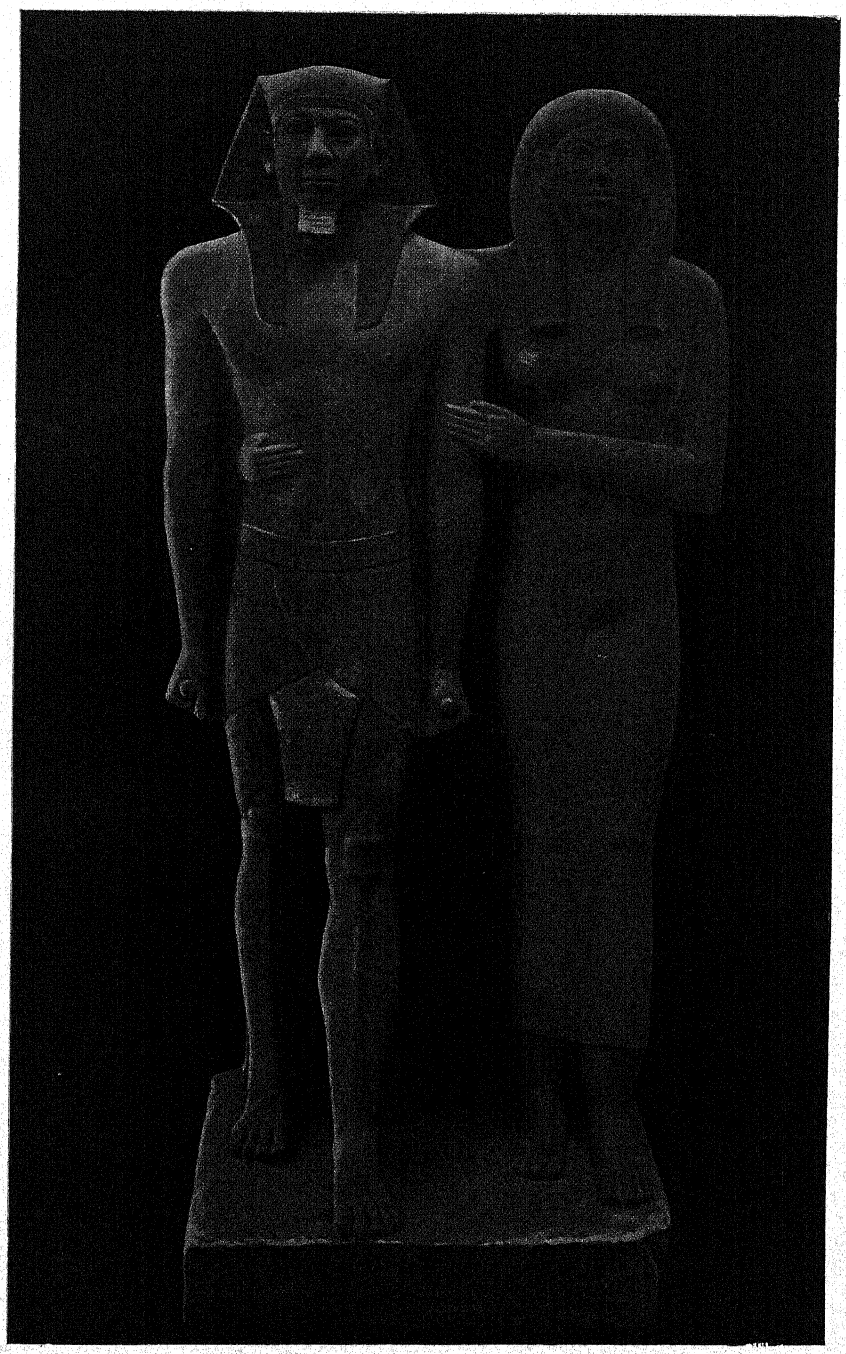


Fig. 81. – Head of an Egyptian of the Old Kingdom. *(Egypt Exploration Fund.)*



Group of Mencheres and his wife, carved from a dark stone. *(Boston Museum.)*

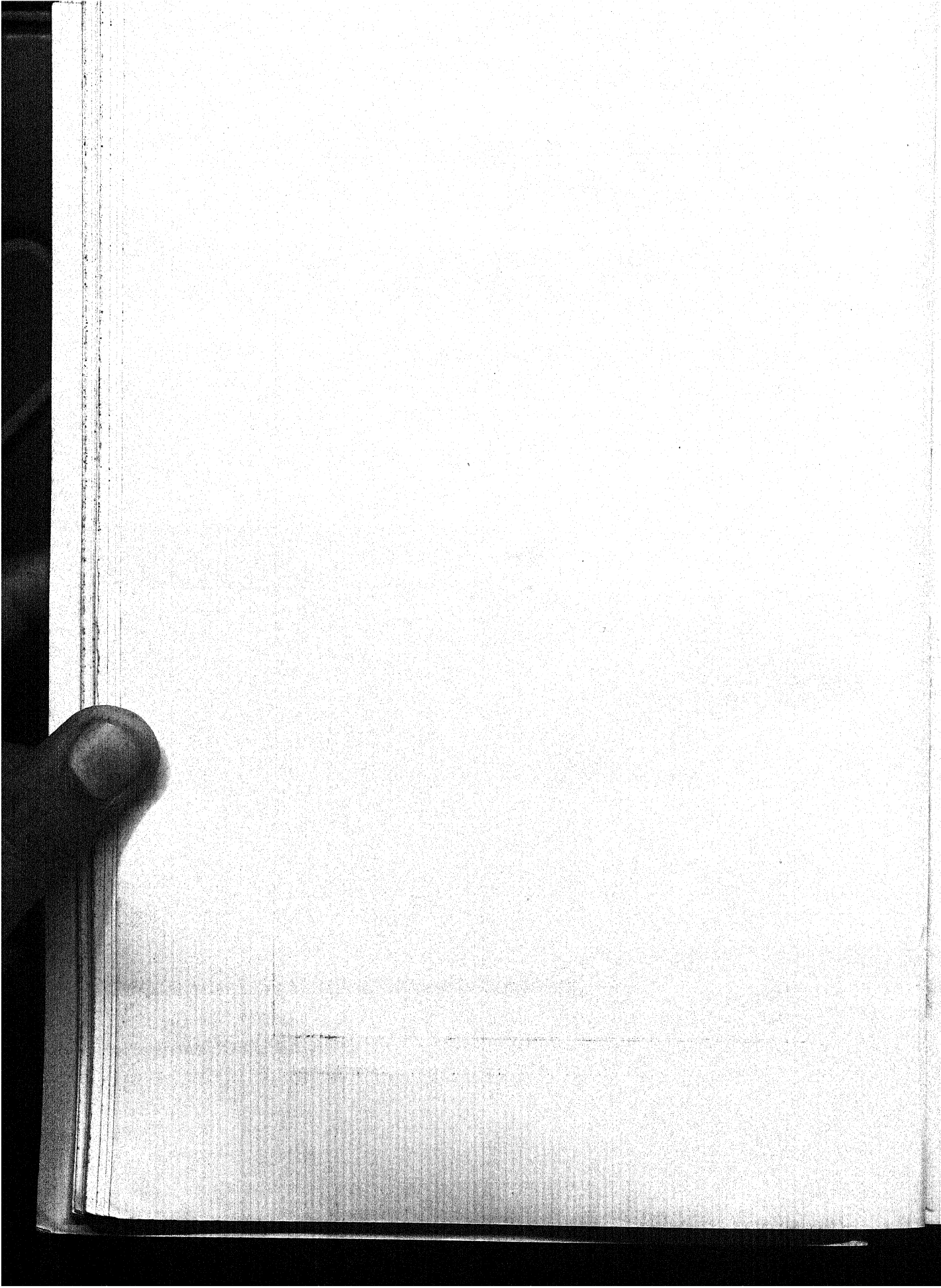


Fig. 82.—Ka-aper.
(Cairo Museum.)

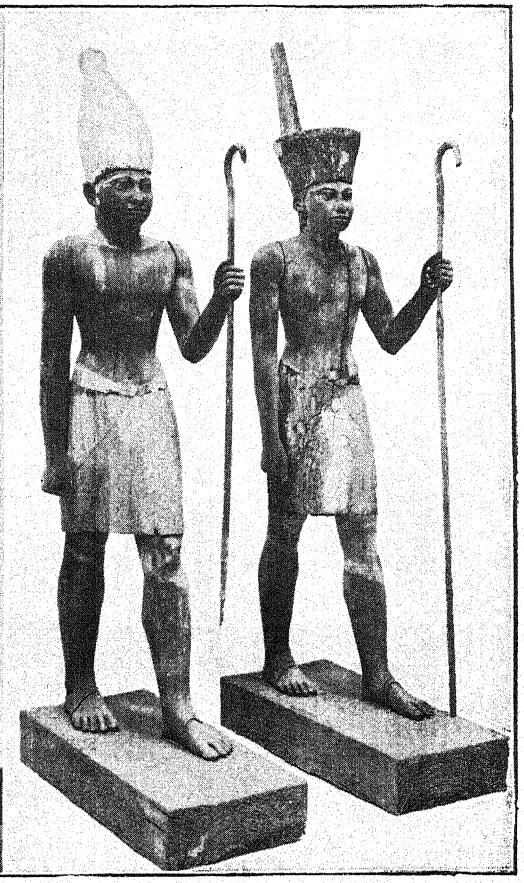


Fig. 83.—Portrait statues of Sesostris I wearing the crowns of Upper and Lower Egypt. *(New York Museum.)*

We know something of the domestic architecture of this period from the painted scenes and reliefs on the walls of the mastabas. Here we see private houses built of wood and reeds supplemented by colored mats. The stone reliefs often reproduce these light structures which must have been used extensively throughout Egypt. The uprights are mortised into the horizontal beams, and the brightly colored mats are vividly depicted making the scene most realistic.

As we have already noted, the burial rites of the Egyptians required the preservation of the sculptured likenesses of the deceased in great numbers, and this custom has been the means of furnishing us with pictures of the great Pharaohs who built the pyramids and the society of which they were the heads. We see muscular impassive men whose lofty calm affords us some conception of the divine rule with which they felt themselves to be invested (fig. 79). The perfection achieved by the sculptors of these early dynasties is something amazing. Many of their statues are graceful and expressive of the personality of the sitter, and we recognize them at once as close resemblances (fig. 80). To give

Fig. 84. — Wooden figure of a woman.
(Museum of Leyden.)

some idea of their realism, we have reproduced the famous wooden figure now in the Cairo Museum called Sheik el Beled. This name was given to it by the Arab workmen who discovered it in the course of certain excavations, because they thought that it strongly resembled the sheik who was their own local magistrate. But the figure is that of an Egyptian of five thousand years ago, probably an overseer of one of the armies of slaves who built the pyramids (fig. 82). Some of the retainers of these kings faithfully followed their master beyond the grave. During the exploration of the cemetery connected with the pyramids of Lisht by an American expedition in 1914, the tomb of an officer of the palace named Imhotep was discovered at the base of the pyramid of Sesostris I. This functionary was buried with two statues of his royal master which are marvellously executed (fig. 83). Portrait statues of priests, court officials and scribes have come down to us, the last seated or crouched and assiduously taking notes with stylus and wax tablets (figs. 80, 81 and 86). The women usually wore long tunics, but we also have some admirable examples of nude women which appear to have been intended purely as works of art. They were of no practical use and could have been prized only for their beauty (fig. 84).

Most of the early Egyptian statues were of softer material than that which was used later. They were of wood or limestone and were polychrome (fig. 86). The reliefs in the mastabas are also painted. Here are scenes depicting every human activity designed to enable the departed to carry on his life beyond the grave. We see him collecting his herds, controlling his slaves, hunting wild animals in the forest or fishing among the reeds on the swampy bank of the great river. These burial reliefs afford us an accurate knowledge of the customs of the early Egyptians who lived at the time the pyramids of Memphis were built. Although we see everywhere the

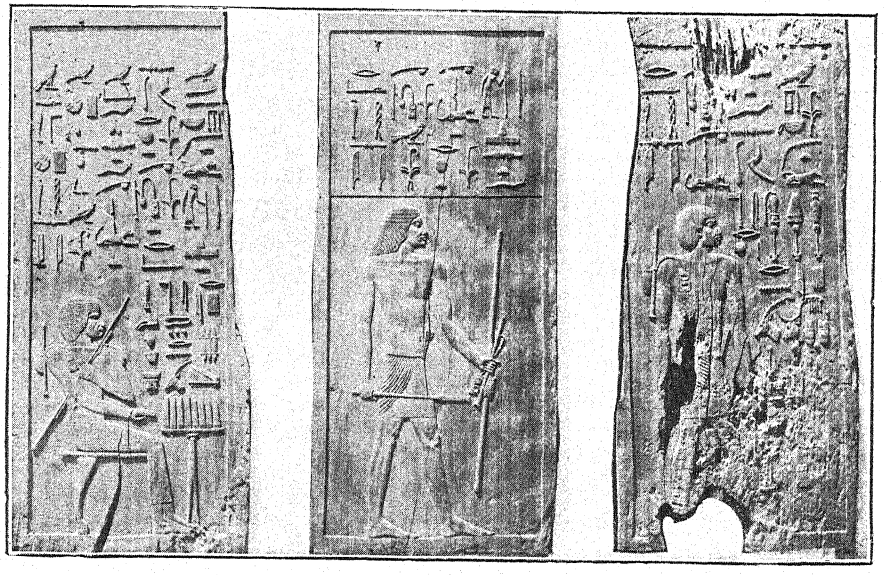


Fig. 85. — Wooden reliefs found in the mastaba of Hesi-ra. MENFIS. *(Cairo Museum.)*

crudeness of a primitive people, there is no indication of the excessive cruelty which prevailed among the nations of the Orient (fig. 85). We see a population wearing few garments and favored by the climate and the fertilizing powers of the waters of the Nile. As for the Pharaohs themselves, although both history and the Bible picture them as arbitrary and despotic, they seem to have been much more humane than their enemies at Babylon and Nineveh. The same is true of their religions. Ammon was no such bloodthirsty god as Baal who demanded hecatombs of sacrificed prisoners and even the beloved first-born of his own worshippers. This may be the explanation why Egypt's good fortune lasted so long; it certainly accounts for the admiration in which this land was held by the ancient Greeks. Science itself took a different aspect in the great temples of the Nile valley from that which it assumed in the centers of Mesopotamian culture. It is difficult for us to comprehend the spirit of this Egyptian civilization, but we should ever keep in mind the fact that when the pyramids were built, not a single European had developed a civil organization.

The ancient Egyptians were a powerful and robust people. Their society consisted of stout intelligent men of simple ideas in which they were calmly confident. Women shared the hardships of life with their husbands. Many of these hardworking helpmates are represented in the mastabas by little wooden figures grinding corn, kneading bread, washing linen and giving us a picture of the domestic life of dynastic Egypt during the third millenium B.C.

Summary.—The art of Egypt dates from a period long before the first dynasties of the Pharaohs founded their old capital at Memphis in the Nile Delta. In predynastic art we find many points of contact with early Mesopotamian art. About 4000 B.C. the kings of the first dynasties constructed along the lower Nile those colossal tombs, the most outstanding feature of which was the pyramid. At their bases were temples dedicated to the cult of the deified monarch, but of these only

the foundations remain. Of this period no government buildings, royal palaces nor private houses have come down to us. We can only reconstruct them from the paintings and reliefs found in the tombs. The tomb was the only monumental building and, indeed, the most important one of this period. The king was buried in the center of a pyramid in a chamber hidden at the end of a long passage. Nobles and other persons of importance were buried in a simpler form of tomb called the mastaba. This was a low structure with sloping walls and containing a small chamber in which were statues and other representations of the deceased. The mummy itself was hidden at the bottom of a shaft, the entrance to which was carefully concealed.

Painting was employed in the coloring of these reliefs and the decoration of the funeral chambers. Most prominent in the sculpture of this period is the colossal sphinx near Memphis, greatly admired for its enormous size. Great numbers of statues have been found in the tombs. These were portraits of the deceased, carved with the object of giving him a material immortality.

Bibliography.— On the origin of Egyptian art. CAPART: *Primitive Art in Egypt*, 1905.— R. WEILL: *Les Origines de l'Egypte pharaonique*, 1908.— G. MASPERO: *Art in Egypt*, 1912.— G. PERROT AND CHIPIEZ: *Histoire de l'Art dans l'Antiquité*, 1882.— FLINDERS PETRIE: *The art and crafts of ancient Egypt*, 1910.— AMELINEAU: *Les nouvelles Fouilles d'Abydos*, 1897.— FLINDERS PETRIE: *Memphis*, 1902; *Abydos*, 1903.— J. DE MORGAN: *Recherches sur les origines de l'Égypte*, 1896.— GARSTANG: *The Burial customs of ancient Egypt.*— BORCHARDT: *Das Pyramidenfeld von Abusir*, 1907, and *Die Pyramiden*, 1911.— For an excellent manual, see MASPERO: *L'Archéologie Egyptienne*, last edition in 1907. and his *Histoire ancienne des Peuples de l'Orient*, 1899.— J. H. BREASTED: *A History of Egypt*, 1910; *Ancient records of Egypt*, 1906.

Fig. 86.— Seated scribe. *(Louvre.)*

Fig. 87. — Colossi of Amenophis III (the so-called colossi of Memnon). THEBES.

CHAPTER IV

THE ART OF THE THEBAN DYNASTIES. — THE GREAT TEMPLES, SCULPTURE AND PAINTING.

EGYPT was the first of the great empires of the ancient world to achieve a mature civilization. The Chaldean Empire preceded it in point of time, it is true, but its sphere of activity was confined to lower Mesopotamia until a much later period.

We have already seen in the sculptures and monuments of the first dynasties the rise of that remarkable civilization contemporary with the building of the pyramids, and we shall now make a study of Egypt in the apotheosis of an agressive empire, with her magnificent temples, her new religious cults and the civil and religious organization which she developed in the fuller consciousness of her achievements as a nation.

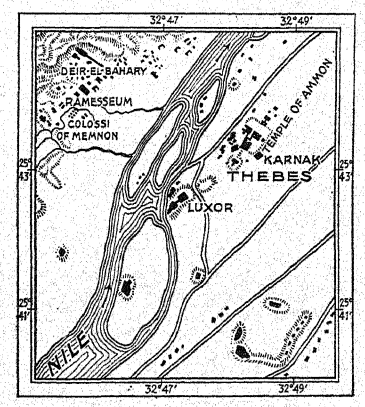


Fig. 88. — Plan of the temples and necropolis of Thebes.

The pyramids of the earlier dynasties and their temples, dedicated to the deified Pha-

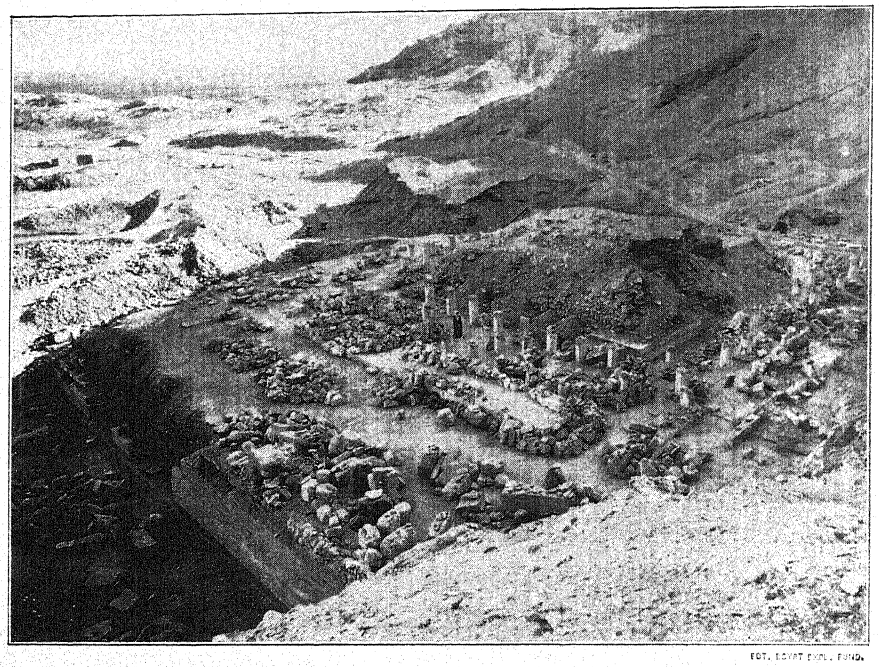


Fig. 89. — Excavations of the temple-tomb of Mentuotep V, the first of the Theban kings.

raohs, were manifestations of king-worship and not the sanctuaries of the nation itself, devoted to the adoration of an actual deity.

Under the Theban dynasties the temple became more important even than the tomb; the king was now only the son of Ammon, the true and omnipotent father of heaven and earth. It was in honor of Ammon, the principal deity of the Egyptian Pantheon, that the colossal religious structures of the Nile valley were erected at Thebes, the greatest buildings that man has ever constructed and comparable only with the ancient pyramids of the earlier dynasties which had their capital at Memphis.

We find in the organization of the Egyptian Empire traces of the independence of the provinces or nomes which had come down from the times of the prehistoric tribes which dwelt along the Nile. This feudal regime possessed the great advantage of having always in reserve energetic and ambitious pretendants to the throne, whenever a long period of supremacy had impaired the vigor and efficiency of the reigning family. Such usurpers, of course, consolidated their position by contracting alliances with the family of the dethroned king and bent every effort toward obtaining possession of the capital and securing the recognition of the Theban priesthood which remained all-powerful for many centuries. For this reason the change from one dynasty to another did not effect the changes in the nature of the government and the religion of the country that might otherwise have been expected. It was only occasionally, and then for a short time only, that an access of local patriotism would lead a new Pharaoh to transfer the capital to his home city or province in order to obtain

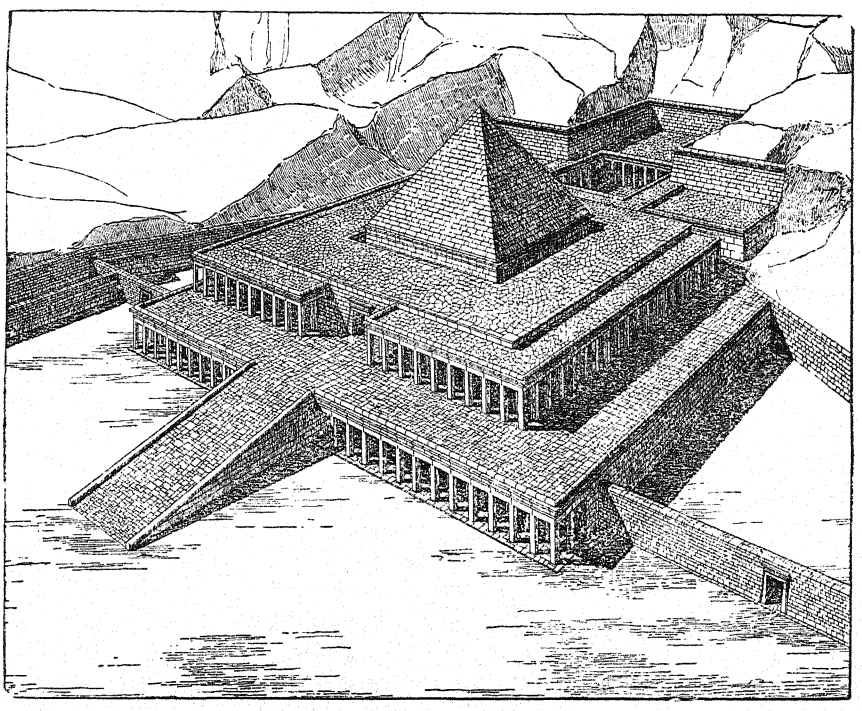


Fig. 90. -- Restoration of the temple-tomb of Mentuotep V. (Excavations of the *Egypt Exploration Fund.* 1907-1909.)

for it the advantage of being the seat of government. On such occasions Thebes and her gods took second place for the time being, but except for these short interruptions, Ammon-Re, the supreme god of Thebes, continued during the two milleniums from the Eleventh to the Twenty-Fifth Dynasty to draw worshippers in multitudes to his magnificent temples on the left bank of the Nile.

It has been said that "as we go up the Nile we come down the centuries". In other words, the further we ascend this great river, the closer we come to our own times and the more recent are the monuments which we find. Near the mouth of the river the traveller encounters the ruins of the ancient capital with its pyramids, and the remains of the civilization of the pyramid-builders are seen on either side of the river until he comes to the temples and sanctuaries of the Middle Kingdom and the Empire which had their capital at Thebes. The seat of government was transferred to the upper valley of the Nile under the Eleventh Dynasty, but the plains of Thebes were, in all probability, a sacred place since predynastic times. It is here that we find the tombs of the first conquerors of the country, and here tradition placed the tomb of Osiris, supposed to have been discovered by Amelineau in recent years. The latter is of the same type as the so-called tomb of Menes discovered by de Morgan, which was described in the last chapter.

After the court was removed to Thebes, the tombs of the Pharaohs still fol-

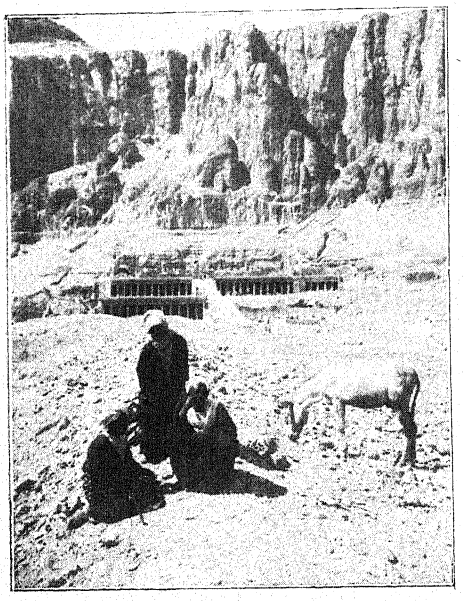


Fig. 91. — Cliff at Abydos containing the royal tombs. (At the foot of the cliff is the temple of Der el-Bahri.)

lowed for a time the pyramidal type of construction, but it became only a symbol to indicate its royal character. A few years ago the Egypt Exploration Fund explored what is believed to be the most ancient monument of dynastic Thebes. This is the tomb of a king named Mentuotep, and it is interesting to note that the pyramid itself had become so small that it was set within a court (figs. 89 and 90). The temple, on the other hand, had expanded, and its halls and galleries surround the pyramid on all four sides instead of lying at the foot of a much greater monument. This was the first of a series of royal tombs constructed under the Middle Kingdom. It explains the purpose of certain brick pyramids the mutilated cores of which are still to be seen on the plain of Abydos, the necropolis of the Theban kings. These purely symbolic pyramids were set upon a broad platform which served as a foundation, for the alluvial soil upon which these monuments were constructed has not the resistance possessed by the limestone rock of Gizeh near Memphis.

The pyramid connected with the tomb of Mentuotep was no longer a tumulus containing the burial chamber. Its mass was thoroughly explored and no traces of burial were found within it. It was a formal pyramid only and a purely symbolic and decorative feature of the tomb. The tomb itself was excavated from the rock of a hill close by, as were the chambers containing the sarcophagi of a number of princesses of the royal family who accompanied Mentuotep to the life beyond. The temple is composed of a series of corridors supported by square columns. These extend around the four sides of the symbolic tumulus which still preserved the traditional form of the ancient tombs of the first dynasties.

The use of these honorary pyramids, as they might be called, lasted for a considerable period. One of the Theban kings not only erected a burial monument of the new type on the plain of Thebes, but he also constructed a pyramid in Lower Egypt which he had no intention of making his tomb.

The Pharaohs finally discarded the pyramid, even as a traditional feature, and their hypogea were hewn from the rocky fissures of the hills. The rocky valley at Abydos lent itself admirably to the concealment behind its bold slopes of the passageways leading to the tombs. The hills themselves were preferable to a costly artificial monument like the pyramid (fig. 91). The natural hill became

a substitute for the pyramid, and the temple, set some distance away at the outlet of the valley, was not connected with the tomb. The entrance to the latter was hidden behind the rock; indeed, no one would believe that the rocky fissures of Abydos could be the entrances to the magnificent galleries of the royal tombs. In spite of all these precautions, most of the tombs of the Pharaohs were violated in ancient times. Even in the time of Herodotus tourists were accustomed to visit tombs which were already empty. The sarcophagi had been carried away by the priests and quietly interred in a secret tomb where kings and queens were all heaped together in the greatest confusion. It was in this condition that Maspero found them, but the sarcophagi were still intact and each bore the record of the officials who superintended the removal.

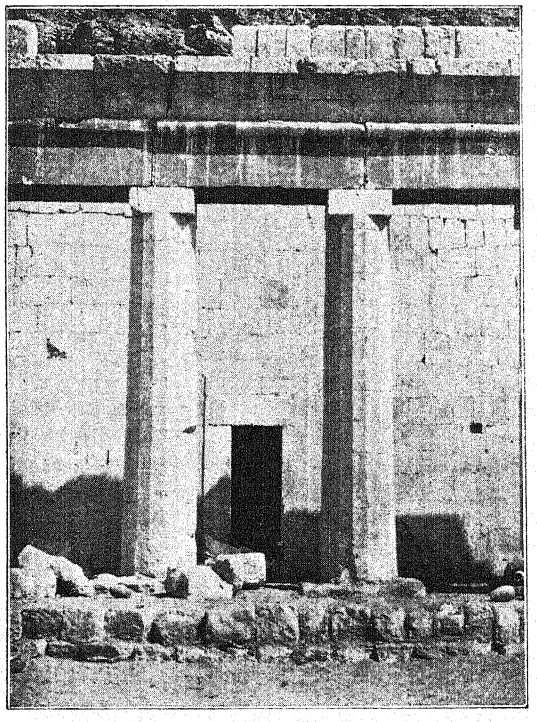


Fig. 92. — Portico of Der el-Bahri, the temple-tomb of Queen Hatasu.

The tombs of the necropolis of Thebes display the same efforts to preserve at any cost the annihilation of the remains that we have already seen in the pyramids. In the heart of the cliff we find the galleries and halls which were the dwelling-place of the "ka", or double, of the deceased, their walls decorated with paintings. Here are scenes from earthly life, the journey of the soul to the Nether World and the judgment of Osiris. The length of the gallery was proportionate to the importance of the tomb, and it was interrupted at intervals by pits in which the passage leading to the burial chamber was concealed. We find a false tomb containing a massive sarcophagus, intended to convince the searcher that the tomb has already been violated. By sounding the walls, a hollow spot is located and another corridor is found leading through a new series of chambers to the true burial chamber. Here is another sarcophagus, often of wood, containing the royal mummy. The tortuous passage may be intended to represent the course of the sun on his nightly journey through the Nether World. In any case the galleries through the heart of the hill are arranged in much the same manner and for the same purpose as those penetrating the pyramids. The concept of the mortuary ritual is very much the same, and only the architectural type of the monument itself is changed.

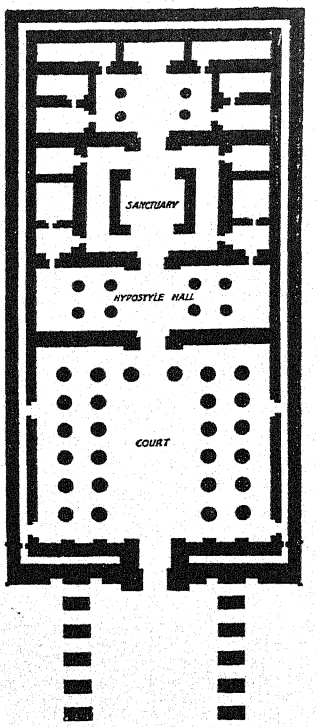


Fig. 93. — Schematic plan of an Egyptian temple.

These tombs hewn from the rocky hills of Abydos are only a single feature of the burial of the Pharaohs. On the plain near the river, as has already been noted, we find the temples of the deified kings. These are more accessible, and here the impressive and ostentatious ceremonies took place. They correspond to the temples at the foot of the pyramids, and their colossal remains are scattered over the desert plain from the river to the foot of the cliffs. Sometimes only a pylon remains intact, or the columns of a hypostyle hall. Again we see seated figures of the king, like the famous statues of Amenophis III which Herodotus called the colossi of Memnon (fig. 87). Even at the time of his visit they stood alone; every trace of the adjoining temple had disappeared.

The most remarkable of these royal temples is the temple-tomb of the famous regent, Queen Hatasu, on the slope of the hill itself. This structure is now known by the Arab name of Der el-Bahri, the monastery of the north. It has been explored by the Egypt Exploration Fund, and a considerable quantity of reliefs and other sculptures have been discovered there. The excavation of this building has caused much surprise, for its arrangement was found to be something entirely new to the experience of the Egyptologist. It does not unfold into a succession of courts like other Egyptian temples, but, following the contour of the ground, consists of a series of terraces at various levels with colonnades which serve as porticos to the open chapels hewn from the native rock. The facetted columns have a simplicity and an elegance of proportion which almost rival those of the Greeks (figs. 91 and 92).

Monumental stairways ascend the terraces; the colonnades of Der el-Bahri were doubtless intended to protect the rooms within from the heat and glaring sunlight. On the parapets of the terraces we see the victorious campaigns of her generals; she herself, a rather masculine appearing figure, fights at the side of her father, the god Ammon. Other reliefs represent the strange adventures of the commanders of her fleet which she ordered to sail to the land of Punt in search of myrrh-trees. The expedition sailed far down the coast of Africa to the country from which the precious incense had previously been brought overland by caravan through Nubia and the Sudan.

On the plain below is the temple of Rameses II known as the Ramesseum and filled with mementos of the great conqueror. He still seems to live in these reliefs, spiritedly leading his armies in battle, or awful and majestic, as he raises his hand above his conquered foes (figs. 100 and 101).

Sometimes a father and his son were both worshipped in the same temple

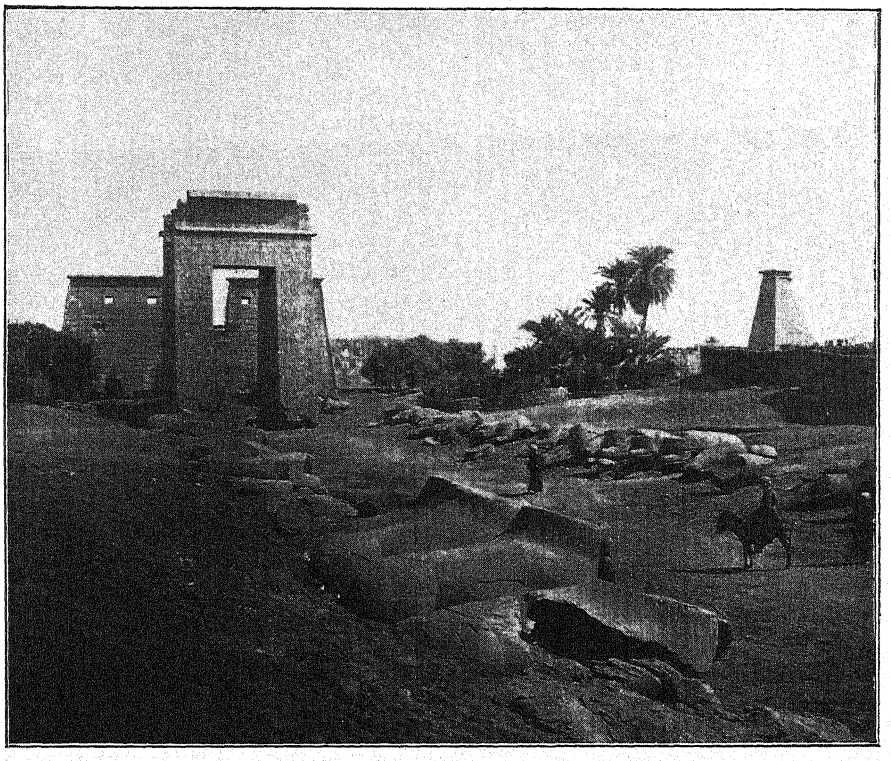


Fig. 94. — Temple of Karnak. THEBES. Dromos, or avenue of sphinxes half buried in the sand prior to the recent excavations.

as in the case of the temple of Kurna begun by Rameses I, the great founder of the Nineteenth Dynasty, continued by Seti I and probably completed by Rameses II. But as a usual thing these temple-tombs were the work of a single reign, completed in any case by the devoted son of the builder who succeeded him. The arrangement of these temples, with the exception of the primitive hypogeum of Mentuotep and the unusual temple of Queen Hatasu, is always more or less the same. It resembles the plans of the religious structures on the other side of the valley, although the latter were not erected for the glorification of one or two kings. Indeed, the personal character of these monuments explains the manner in which they were allowed to go to ruin, for only the dynasties of the kings who built them would carry on the cult and keep them in repair.

We find the temples of Karnak and Luxor on the other side of the river in a much better state of preservation. These are the work of a long line of kings. Both were dedicated to Ammon and were connected by a monumental avenue, traces of which are still to be seen on the level plain. But Thebes, the "city of a hundred gates" which lay about them, has entirely disappeared. Today they stand alone on the alluvial soil of the left bank of the river amid a desert of ruins, visited only by troops of tourists from the hotels at the foot of the walls

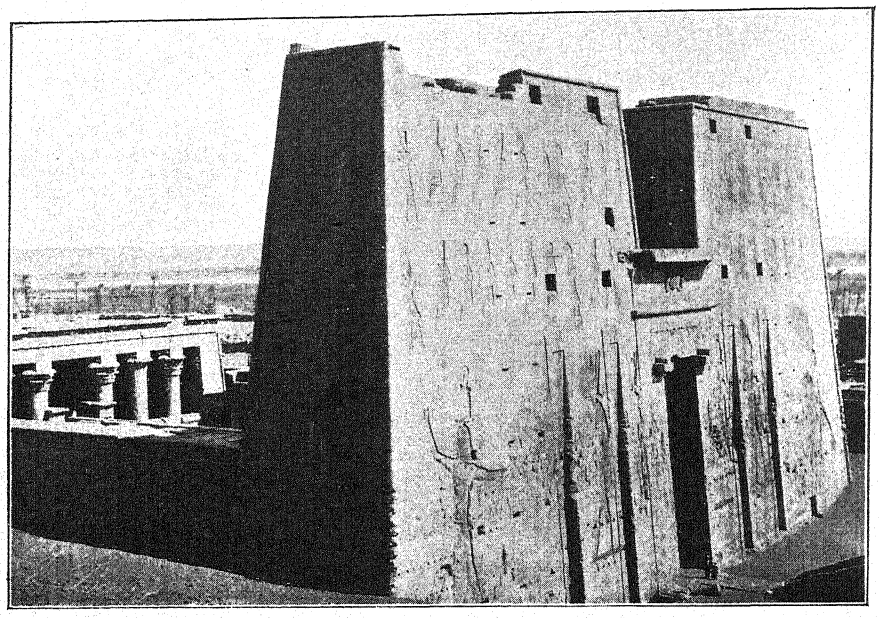
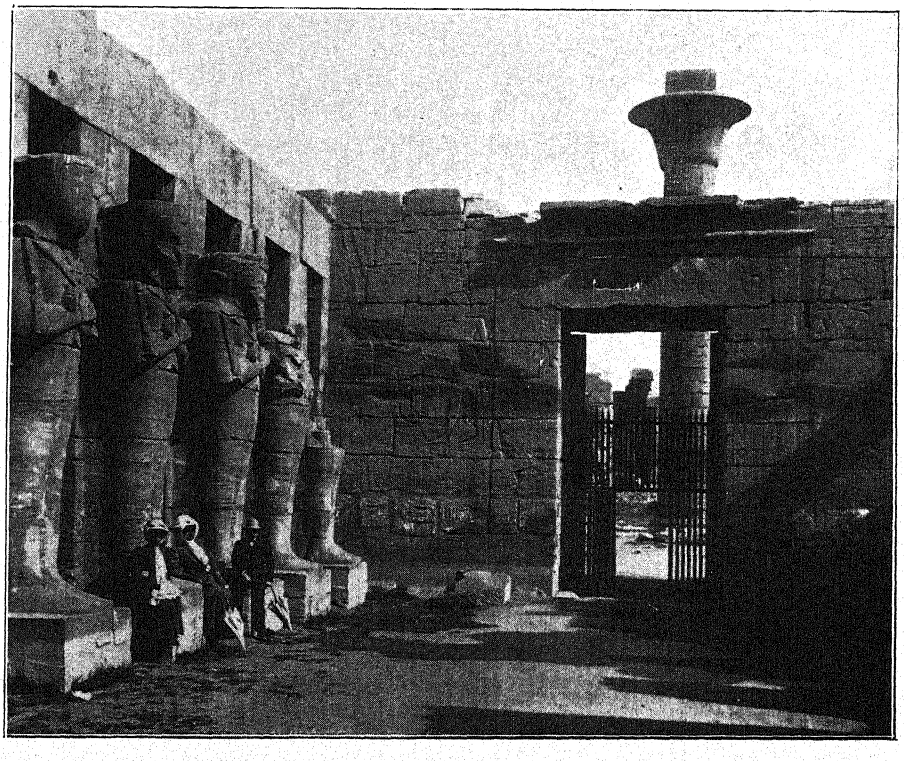


Fig. 95. — Entrance to an Egyptian temple. Pylon of the temple of Horus at Edfu.

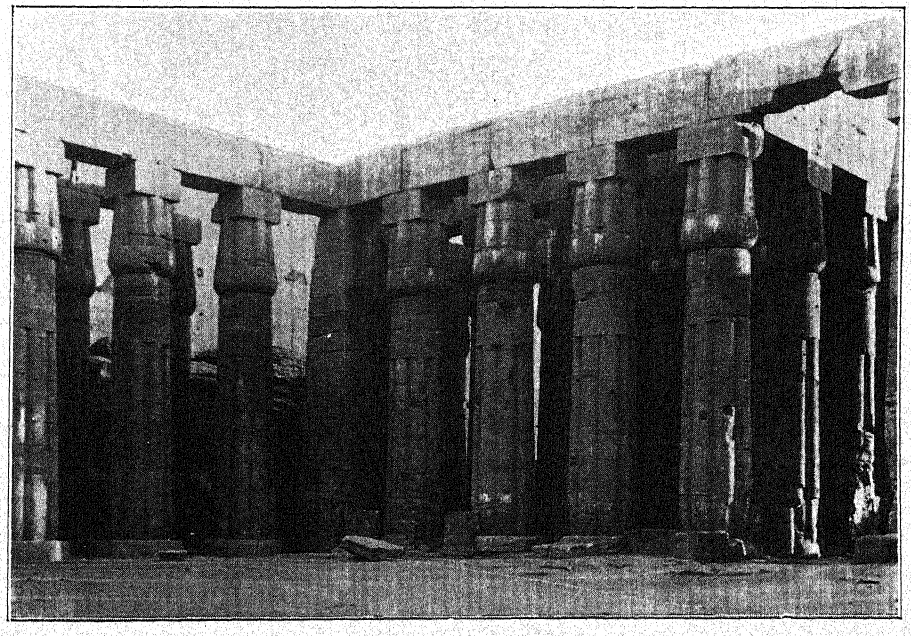
of Luxor. All the wealth and power of the great kings who conquered Asia were needed to build merely the nuclei of the temples of Karnak and Luxor with their pylons and hypostyle halls. Down to the times of the Greek kings, or Ptolemies, and the Roman Emperors, it is difficult to find a Pharaoh who did not make some addition to these colossal structures. One enriched a court with a new row of columns; another was content with embellishing it with a pair of delicate obelisks; and still another carved his portrait, or merely his name perhaps, upon the temple walls.

In every period of prosperity the damages caused by previous wars or revolutions were made good; even in times of invasion foreign conquerors like the Persians could not resist the impression produced by the temples of Thebes and added their barbarous names to the carved list of their builders. These buildings are a monumental summary of the history of Egypt itself; they were the real centers of religious and political activity so long as Thebes remained the seat of government. The Pharaohs gave their best efforts to the building and enlargement of these sanctuaries, and the royal tombs which had been the favorite enterprises of the earlier dynasties now took second place.

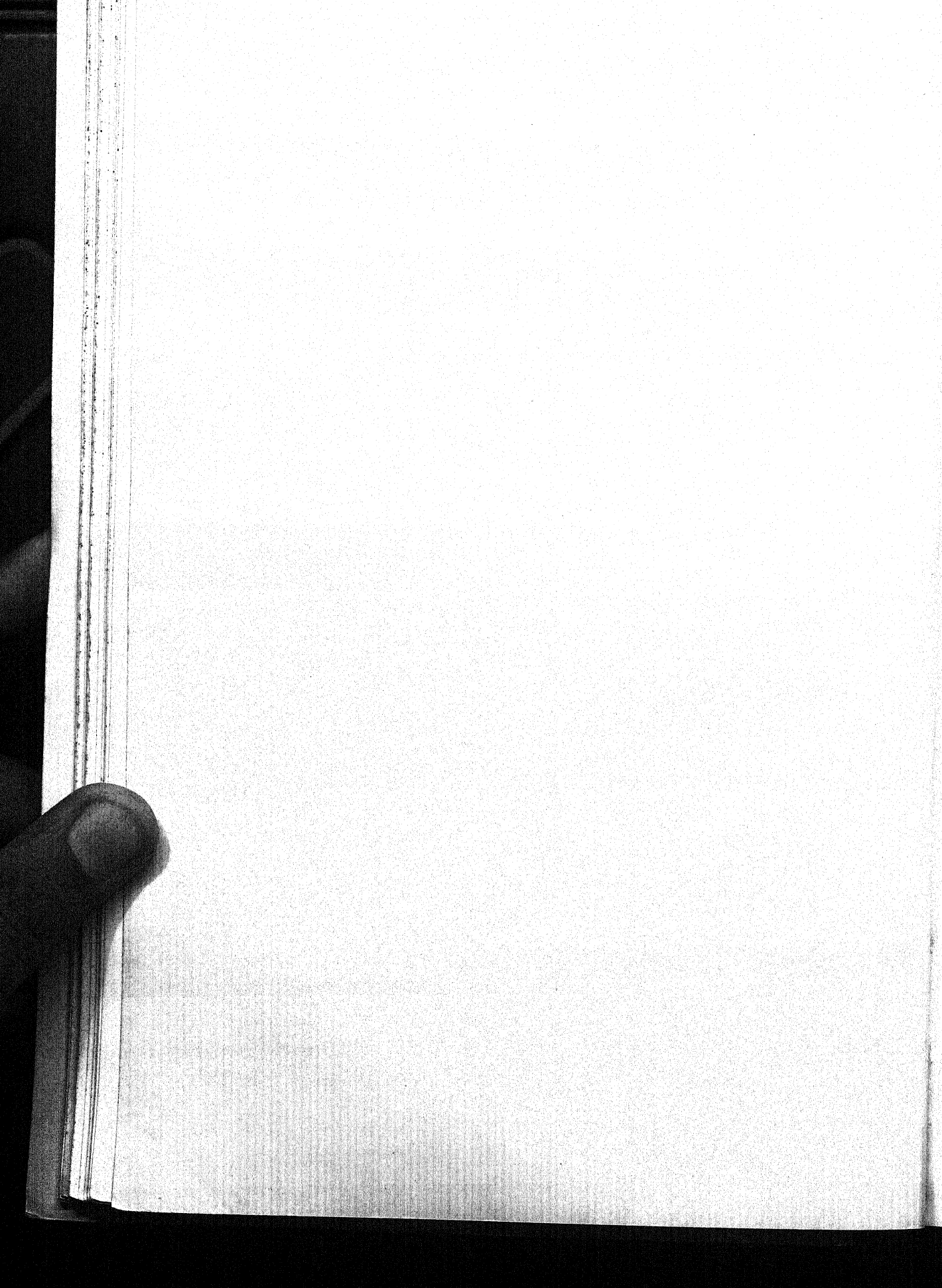
These structures became so complicated as a result of so many additions and embellishments that it is now almost impossible for the archaeologist to eliminate the accessory features and reduce the complexes of halls and courts to the original elements of an Egyptian temple. Greek writers, like Herodotus and Strabo, who visited Egypt found it extremely difficult to describe the temples they found there, when they attempted to convey to their readers at home an idea of the arrangement and plan of these monuments. Although the activ-



Court of the temple of Rameses III at Karnak. THEBES.



Court of Rameses II at the temple of Luxor. THEBES.



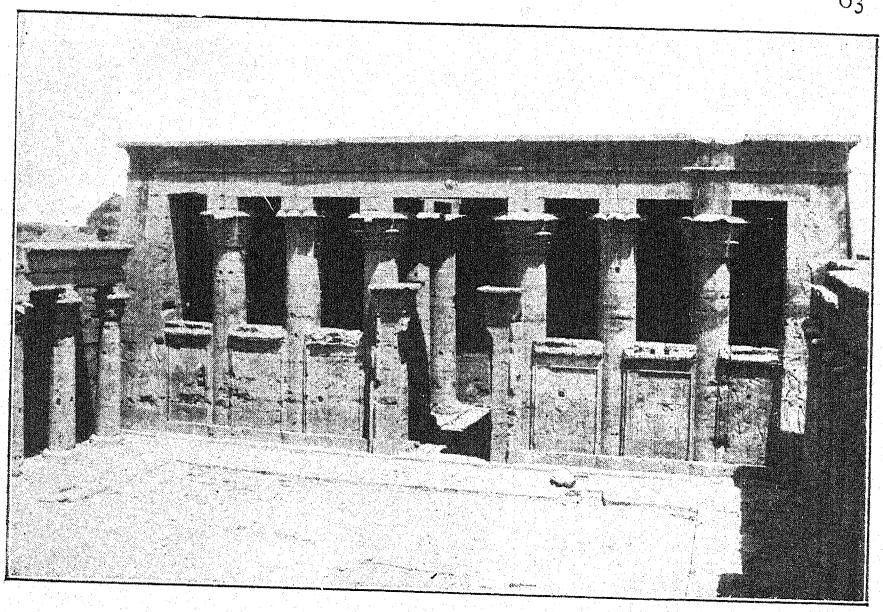


Fig. 96. — Court of an Egyptian temple. Entrance to the hypostyle hall.

ities carried on in these temples had been greatly reduced when these writers visited them, nevertheless, their texts are most valuable, for they are a great help in the analysis of these intricate structures. Indeed, we still employ the terms which the Greeks used to describe them, such as pylons, hypostyle halls, obelisks, etc.

The Egyptian temple always consisted of the following elements (fig. 93): The approach was an avenue of sphinxes (fig. 94) which led to the first pylon (fig. 95). Inside this gate was the forecourt (fig. 96), a public place accessible to all; beyond it was a great hall used for ceremonies and called the hypostyle hall because it was lighted from above. Sometimes there was a second pylon between the forecourt and the hypostyle hall, but in the simpler temples an ordinary doorway led from one to the other. Behind the hypostyle hall was the entrance to the naos, or sanctuary, which was reserved for the king and priests, and behind this was a second court leading to the store-rooms, apartments for the priests and the like. The entire temple-complex was enclosed within a rectangular double wall containing a gallery; this completed its isolation from the world outside. The essential elements, therefore, are the pylon, the forecourt, the hypostyle hall and the sanctuary, all of which we shall now describe in detail.

The pylon is really a triumphal gate; it is purely decorative and consists of a gateway flanked on either side by a rectangular tower which is composed of a solid mass of masonry and does not contain any apartments, nor even a passageway, other than the small stairway leading to the small openings for the supports of the flagstaves which bore pennants on festal occasions (fig. 95). The surfaces of the walls sloped inward and lent themselves to relief decorations

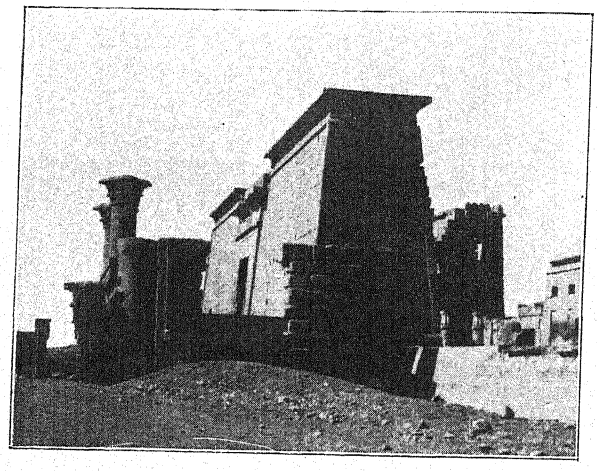


Fig. 97. — Pylon, or monumental gateway of a temple with two great columns.

recording the events of the reign of the Pharaoh who built it. Great statues of the king were set on either side of the gateway which was often further enriched by granite obelisks carved from a single block of stone. The towers were finished off at the top with the only moulding known to Egyptian architects, the inverted gola, the projecting curve of which cast a hard narrow shadow along the top of the pylon. Sometimes, instead of the great monolithic obelisks, two gigantic columns embellished the gateway (fig. 97).

The courts were much more varied in their arrangement (fig. 98). Sometimes they were not surrounded by columns, and again there were one or two rows of columns on either side. Often, however, they form an actual cloister running round all four sides of the open space. In the forecourt of the temple of Karnak two rows of monumental columns extend across it from door to door, a magnificent avenue bisecting the great quadrangle. This is really a prolongation of the avenue of sphinxes leading to the outer gate of the sanctuary. In some of the temples the walls on either side of the court were ornamented with a row of colossal statues as in the Rameseum and the temple of Karnak. (Plate VII.) When columns were set on all four sides of the court they were frequently not all of the same design; on two sides the capitals of the columns facing one another would be bell-shaped, while those on the other two sides would be in the form of lotus buds. There were also temples, however, like that of Luxor where all four sides of a

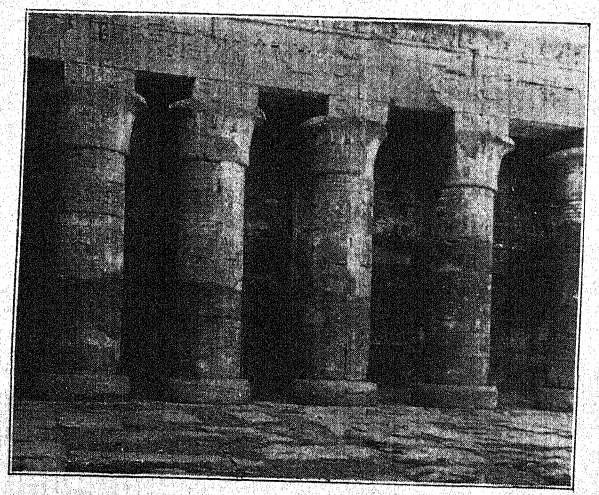


Fig. 98. — Palace of Rameses III at Medinet-Habu. THEBES.

Fig. 99. — Ruins of the court and entrance to the hypostyle hall. OMBOS.

court are ornamented with columns of the same pattern. (Plate VII.) These courts are usually very large and must have been open to the populace. They really form a sort of antechamber to the sanctuary and correspond to the peristyle surrounding the cella of the Greek temple. Some of the ceremonies were no doubt performed in the court, but the more important rites were performed in the hypostyle hall beyond the court, and here the public was not admitted. Like the pylon, or gateway, the term hypostyle hall is also Greek and means that it was lighted from above. It was divided into aisles by lines of columns which were not all the same size; those supporting the nave had capitals in the form of an open flower, and along the aisles on either side were shorter columns with clustered papyrus-bud capitals. Above the nave was left a space filled with stone lattice-work which let in the light on either side. (Plate VIII.) A hypostyle hall, therefore, is a large columned hall with a flat roof of massive lintel construction. Down the center runs a nave higher than the rest of the apartment, also roofed with great slabs of stone. The hall is enclosed by stone walls and lighted from above (fig. 100).

The hypostyle hall of the Egyptian temple was dimly lighted, for light was admitted only from the lattice-work above the aisles whence it filtered through the lofty columns. These were ornamented with brightly colored polychrome

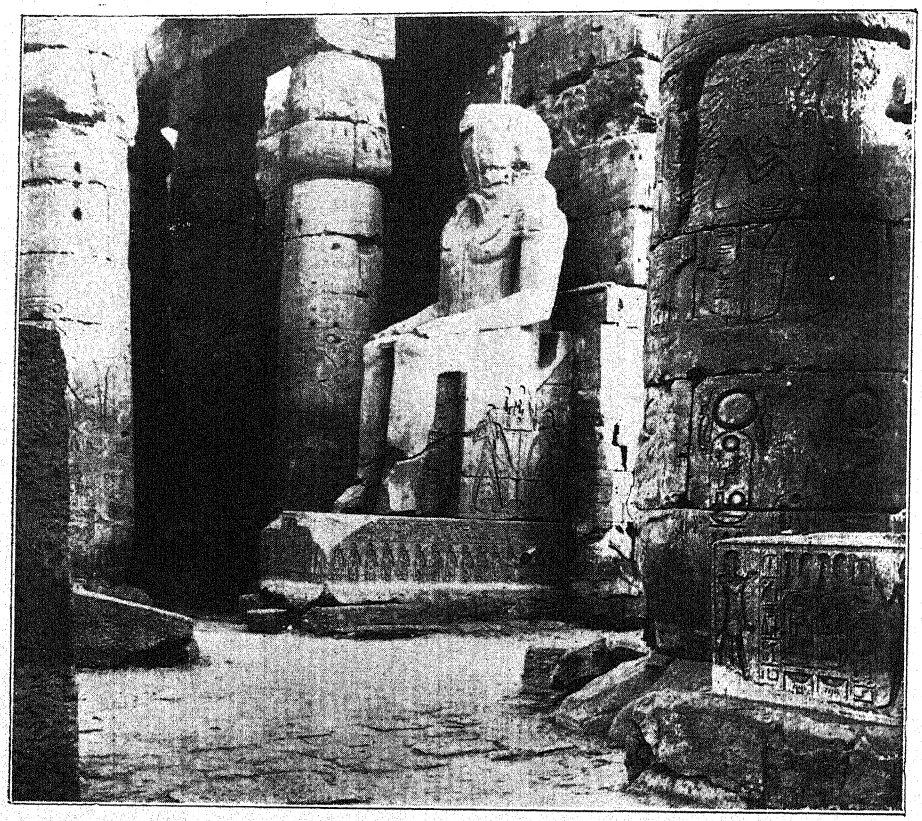


Fig. 100.—Entrance to the hypostyle hall of the Ramesseum. THEBES.

reliefs and were the masterpieces of the architects and artists of Egypt. The size of some of them is stupendous; the great hypostyle hall of Karnak is the largest stone-roofed building in the entire world. It is four hundred ninety feet long and one hundred seventy-five broad; one hundred thirty-four columns support the roof and the twelve in the nave are as large as the Column Vendôme in Paris. A Gothic cathedral would go easily into this hall.

The actual sanctuary was in another hall which often lay beyond a smaller court. Here was the holy of holies, believed to have been accessible only to the Pharaoh and the high priest, and here was the image of the god (fig. 102). The further we go, the smaller become the halls and courts; the ceilings become lower, and the level of the floor, higher. Even the light grows dimmer, and every accessory prepares the mind for the mysterious sacred chamber containing the divine image. Strabo affirms that the Egyptian sanctuary, unlike the Greek, contained no statue of the god, but we know from the inscriptions that there were idols which spoke and which were consulted by the kings as oracles. It is evident that the little shrine of stone or wood, like the miniature building found in the second hall, contained some very sacred object (fig. 103). One of these shrines carved from a single block of stone and bearing the insignia of

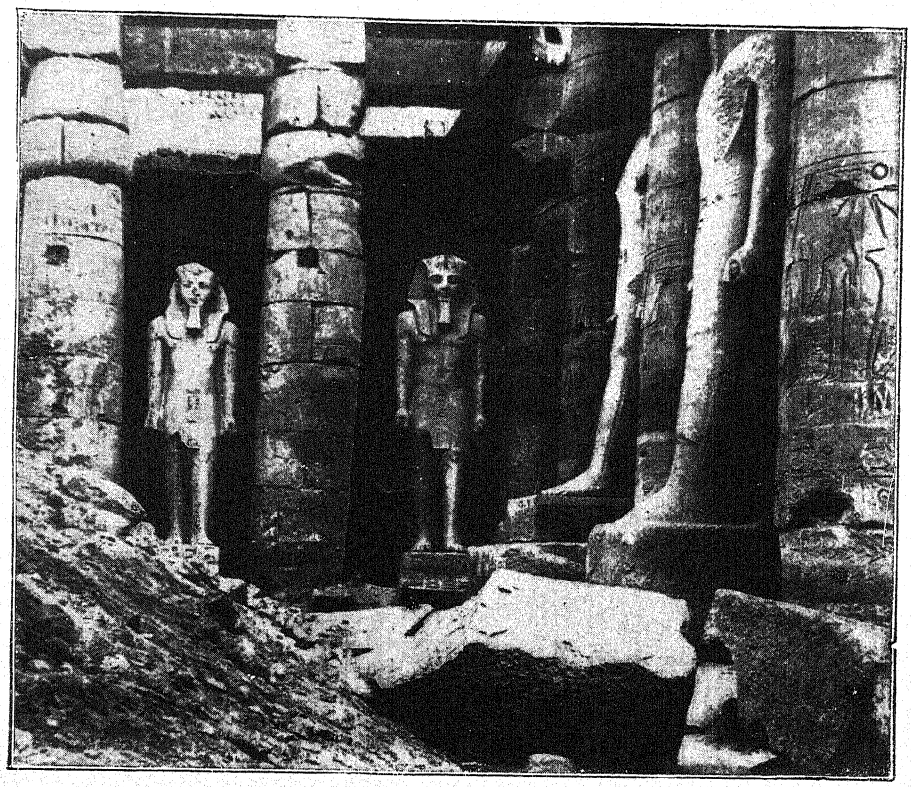


Fig. 101. — View of the Ramesseum in course of excavation. THEBES.

Nectanebes I was found in the temple of Edfu; another handsome one in the Louvre bears the name of King Aahmes.

We have now covered the important elements of the Egyptian temple, the avenue of sphinxes, the forecourt, the hypostyle or ceremonial hall, the sanctuary and the holy place itself with its shrine. Besides these there was a structure to the rear also enclosed within the temple wall, containing the apartments of the priests, etc. There were other additions to the temple structure, it is true, but these are the essential features.

To attempt a chronological classification of Egyptian styles is a hazardous matter. The column presents a great variety of forms which coexisted in every period. We find square pillars like those of the Temple of the Sphinx in Upper Egypt in great numbers. Columns with plane facets are also found in abundance, as in the colonnades of Der el-Bahri (fig. 92) or the better known ones at Beni-Hasan. The graceful lotus-flower capital crowning the columns of the court of the temple of Luxor and the Ramesseum (Plate VIII) at Thebes has its antecedents in the ancient Egypt of the time of the pyramid of Abusir. Indeed, it is quite impossible to establish a rigid classification of Egyptian styles of architecture based on the various types of columns. It is true, however, that certain types were especially favored during the first empire such as the palm-

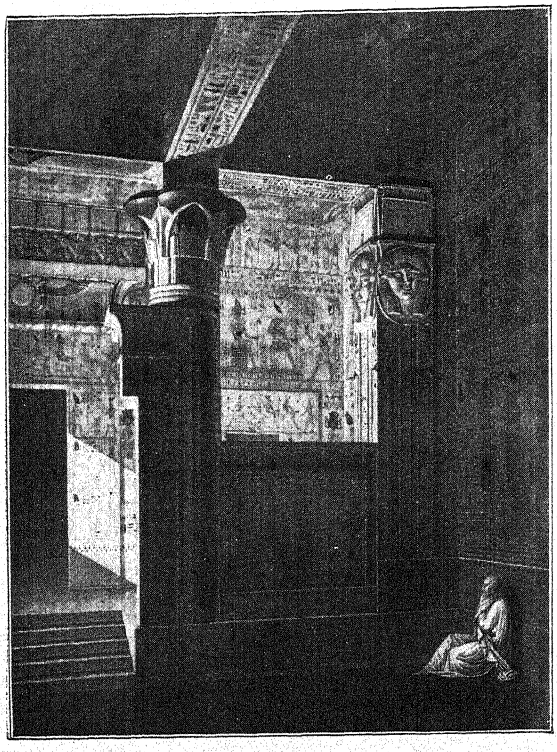


Fig. 102. — Entrance to the sanctuary of an Egyptian temple. (Restoration, copy from the work: *Description de l'Egypte.)*

tree capitals. Others more complicated were the inventions of a later period and were much used by the architects of the last Pharaohs. The so-called Osirian column, consisting of a square pier against which stands a figure of Osiris, which we have already noted in the Rameseum, dates chiefly from the reigns of the Ramessids and may almost be said to characterize the buildings of these kings. One very typical feature is the absence of a base to the column. There is, at most, only a low ringlike cushion which gives the column the appearance of resting upon the ground.

The poor construction of these monumental temples contrasts strongly with their enormous size and wealth of ornamentation. The great temples of Thebes were carelessly built. The foundations are poor; many of the columns are out of line and the walls bulge and sag for this reason. The work of strengthening and restoring the remains of the temples of Egypt which has been undertaken in recent years is indeed a difficult task.

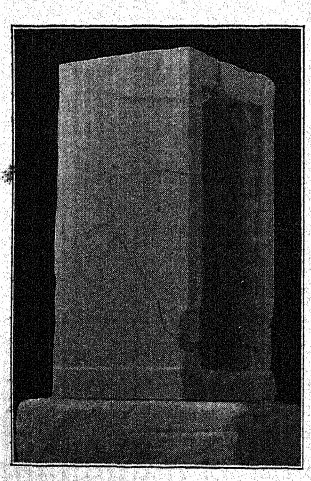
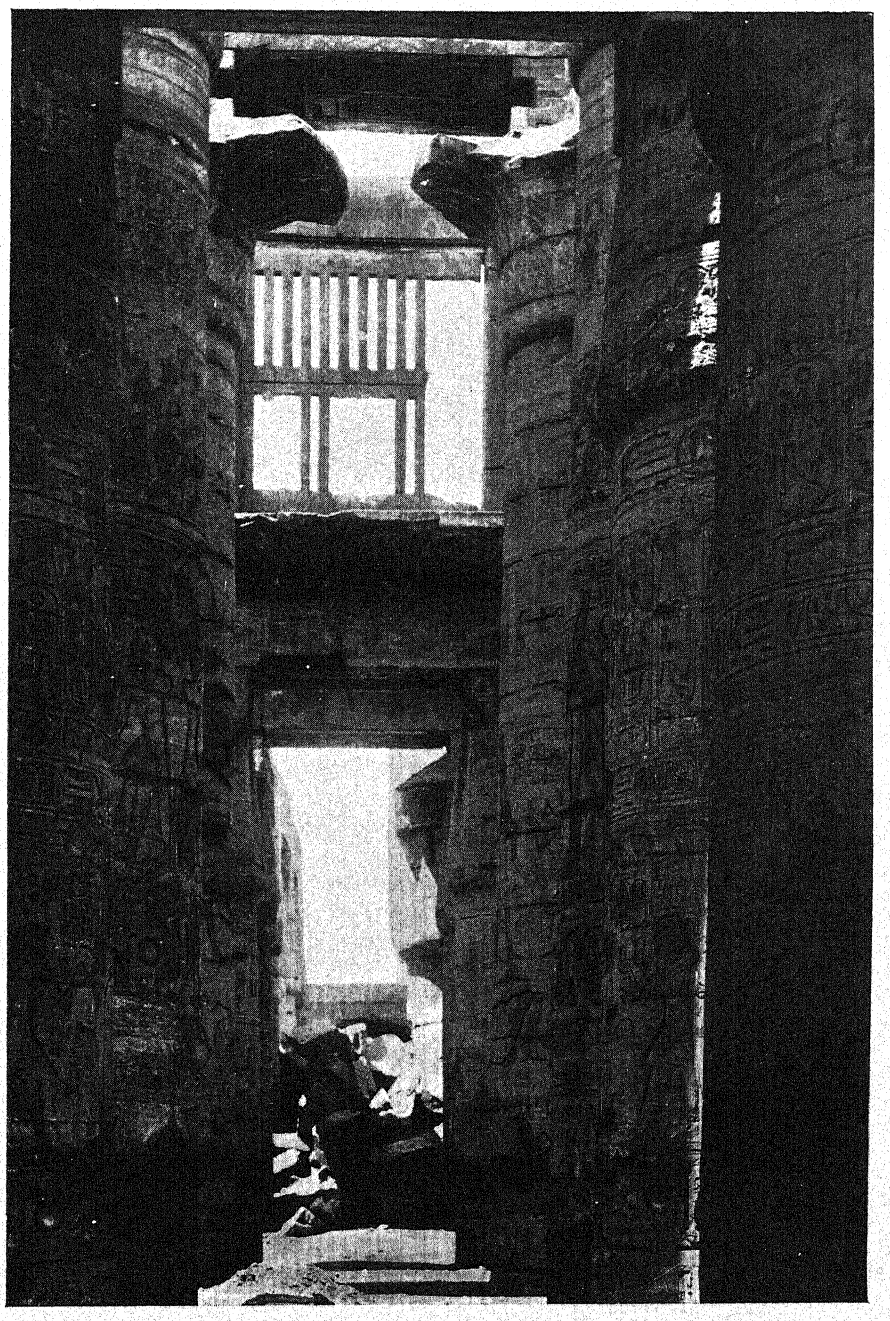


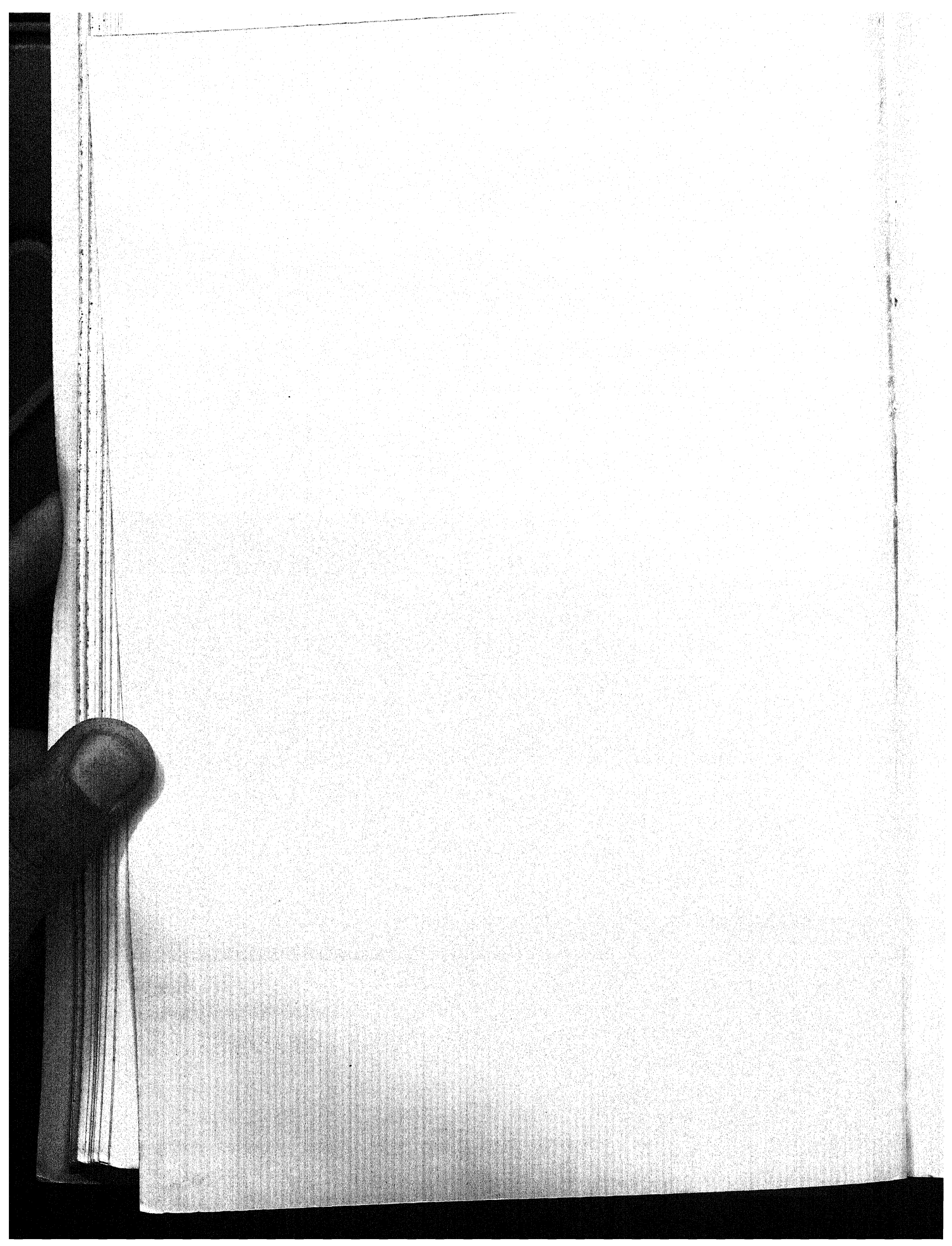
Fig. 103. — Egyptian sacrarium in a temple.

Even the wall structure is often defective. There will be an outer casing of carefully hewn stone blocks, while the interior filling is of concrete of faulty consistency. The towers of the pylons often crack and fall apart of their own weight.

Both sculpture and painting contributed greatly to the general aspect of these monuments (fig. 104). The temples are decorated with reliefs which cover all the plane surfaces of the building, unrestrained by the distribution of such architectural features as the architrave, frieze and cornice



Temple of Karnak: Hypostyle hall. Windows with lattice-work. THEBES.



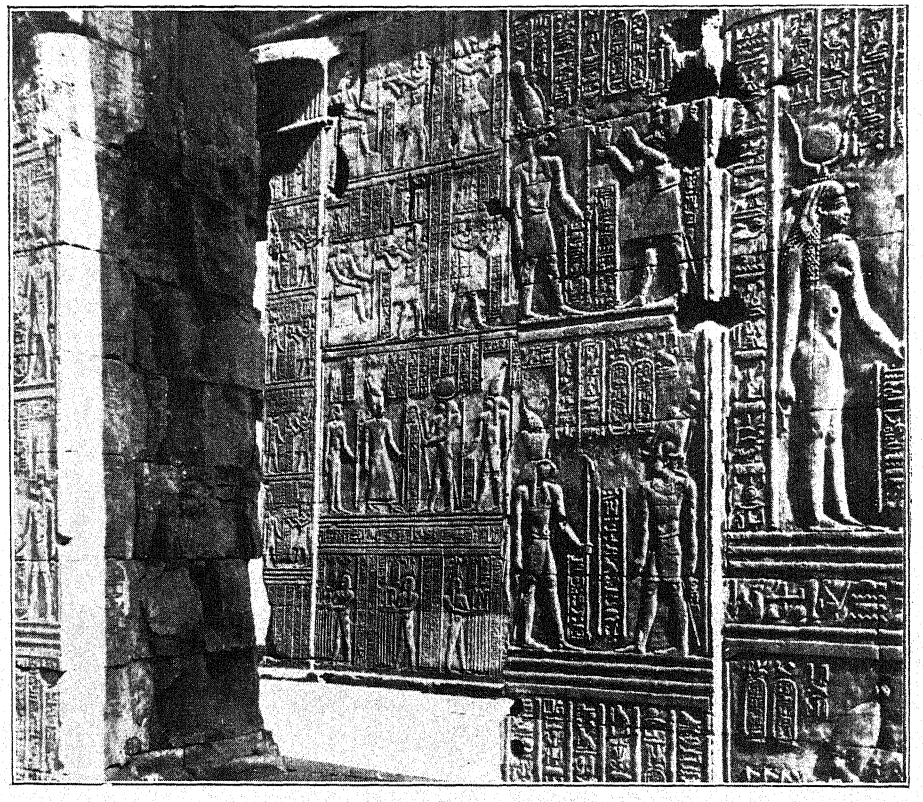


Fig. 104. — Wall of the temple of Luxor covered with reliefs. THEBES.

as was the case in the Greek temples. Wherever a vacant space was available, on the walls and even on the fusts of the columns, the sculptors covered it with reliefs. They even filled up the joints between the stone blocks in order not to be limited by their outlines. These reliefs were painted polychrome, and in some of the buildings the dry climate of the country has still preserved the colors in all their pristine brightness for our admiration. They were usually carved in low relief on wall surfaces; the intense light of the sun in that dry southern climate accentuates every detail. The figures are admirably drawn and the reliefs must have been carved after the stones were set in place for they stand out from a background lower than the surface of the wall itself (figs. 105 and 106). But Egyptian artists were entirely ignorant of perspective, so their reliefs never produce the effect of an actual composition (fig. 108).

The public buildings of Egypt under the Theban Pharaohs could never have possessed the magnificence or permanent character of the temples. Even palaces were often built of brick. The exploration of the palace of Amenophis IV at Tel el-Amarna has given us some conception of the provincial residences of the Pharaohs. Medinet-Abu, near Thebes, which appears to have been the favorite palace of Rameses II, is a two-storied stone building of a military char-

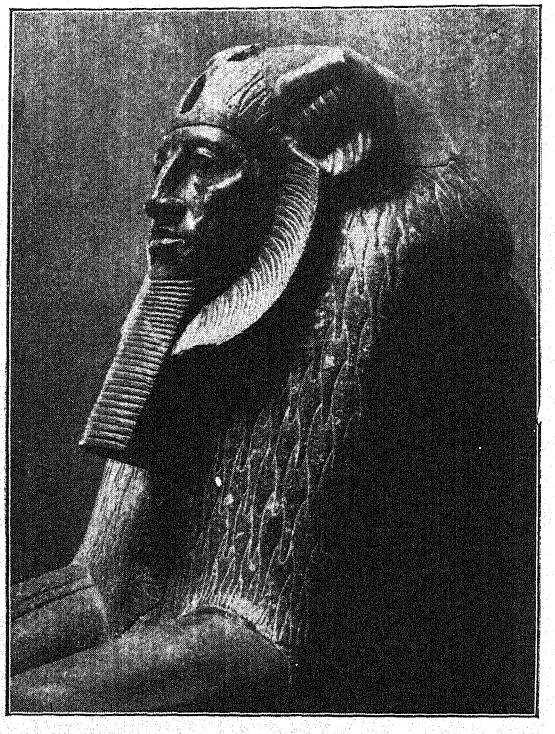


Fig. 105. — Sphinx with the head of a king.
(Cairo Museum.)

acter. In the reliefs of the temples and the paintings in the tombs we often see represented the homes and villas of men of wealth and court dignitaries. The plans of these houses, so far as we are able to ascertain, are of two or three fundamental types, all having a central court, or gallery. Some seem to have been a sort of pavilion surrounded by gardens.

The vast area of the ancient city of Thebes must have been largely occupied by simple houses of sun-baked bricks. This is the only explanation for the fact that the great temples seem to be out in the desert some distance from any remains of human habitations. Not a trace of city walls or gateways remains, so we are obliged to conclude that these cities could not have been well fortified. Egypt was well defended by the very nature of the country, its only point of attack being the Isthmus of Suez. This did not prevent the country from being overrun by a horde of Semitic invaders led by the Hyksos, or Shepherd Kings. Once the isthmus was forced and the Egyptian army defeated and put to route, the poorly defended cities would fall, one after another. The accounts of the Greek travellers confirm this opinion, for when they returned home, deeply impressed by the colossal size of the temples of Egypt as they were, they had little to say of the cities and palaces. The labyrinth of which they tell was simply an invention of the times of Herodotus and Strabo.

Only the remains of the fortresses which defended the Nubian frontier have come down to us. Their tapering walls were crowned with battlements and equipped with double and triple gates to guard against surprise. Later, when their Syrian campaigns had brought the Egyptians into contact with the nations of Asia, they learned to protect their fortresses by fosses and redoubts.

In addition to their decorative reliefs, the Egyptians carved figures in the full round and often displayed that taste for gigantic statues of exaggerated size so characteristic of their art from the time of the pyramids down to that of the temples of Thebes. Some of the statues of their kings at the gates of the temples

Fig. 106. — Portrait of Toutmosis III.
(British Museum.)

Fig. 107. — Portrait of Amenhetep III.
(British Museum.)

were actual colossi, but besides this almost grotesque taste for the gigantic, the sculptors of the Empire show extraordinary ability in the representation of the great dignitaries, priests and rulers who commissioned them to carve their

Fig. 108. — Stela of Amenophis III.

Fig. 109. — Portrait of Akhenaton. *(New-York.)*

portraits. The temple of Karnak is filled with votive statues of the kings who were its patrons, indeed, it is almost a portrait gallery of the Theban dynasties. At Luxor there was also an incredible number of statues. Enormous quantities of carved figures have been discovered at Karnak in large pits which had been afterward filled up with earth and debris. New dynasties were obliged to clear out the temples in order to make room for the statues of their own kings. It is interesting to note that in spite of the sameness imposed by their rank each Pharaoh retains a certain individuality. Where several statues of the same king have come down to us, we can even see the lines that advancing age left upon their faces. Egyptian art was far from being a hieratic art, reproducing always the same set forms. The statues of the kings differ as did the men

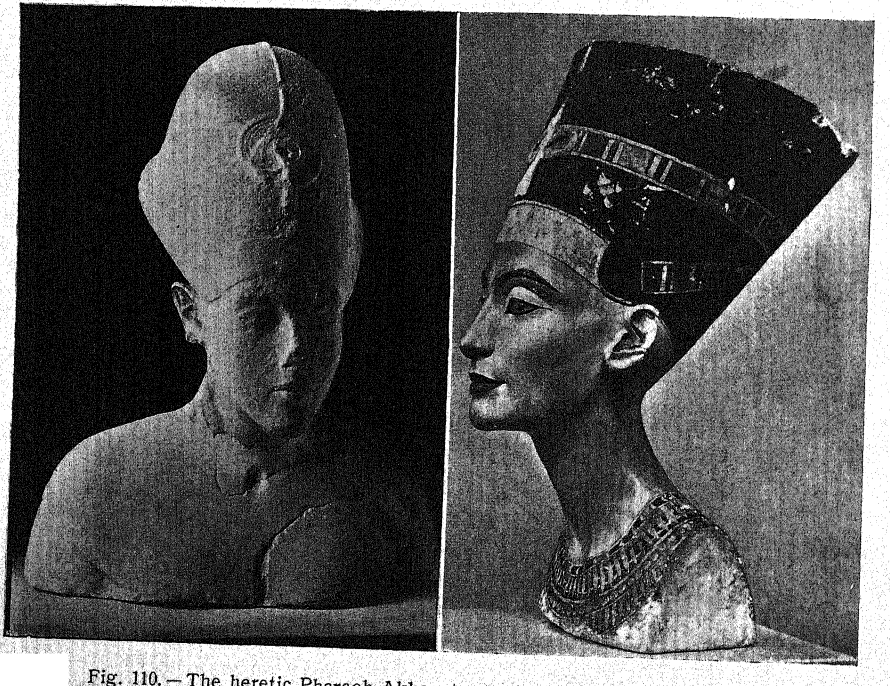
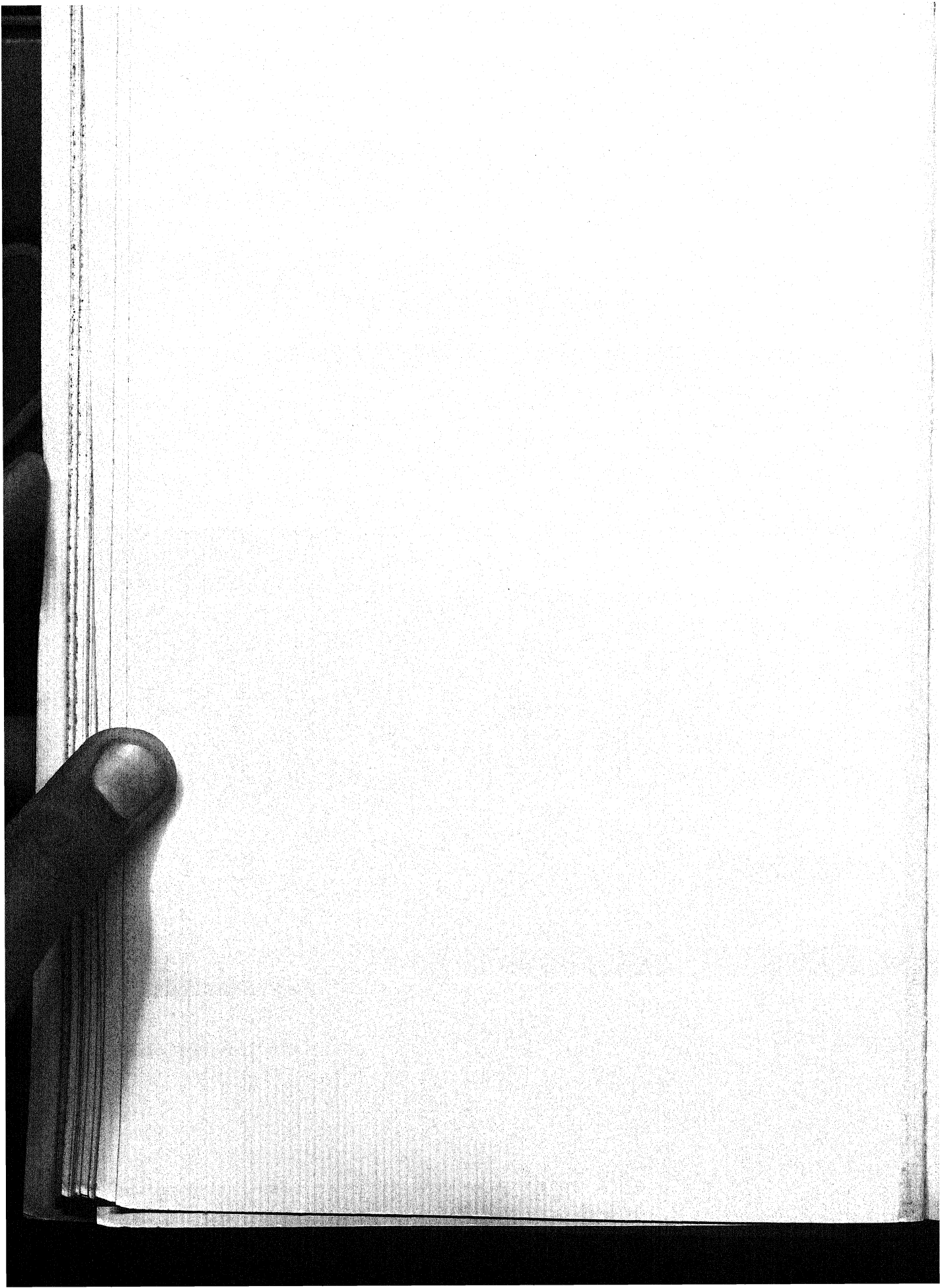


Fig. 110. — The heretic Pharaoh Akhenaton and his wife Nefer-nefru-aton.
(Louvre Museum.) *(Museum of Berlin.)*

PHOTO EGYPT. EXPL. FUND.

Group of Amenophis II and the cow, Hathor. *Cairo Museum. (Naville.)*



themselves. Some are portraits of robust, well balanced men, such as the three of Amenhetep III, which were carved at different periods of his life. These are now in the British Museum (fig. 107). Others are more delicate and boldly conceived types like the portraits of Rameses II (fig. 116). We also see the thin ascetic type as in the splendid heads of Akhenaton (fig. 110). Perhaps the finest of all are the remarkable portraits of the twelfth dynasty kings with their lifelike heads and sphinx bodies, now in the museum at Cairo (fig. 105).

The character of every one of these great Egyptian kings is to be seen in his portrait; the same is true of the members of their families, even in the case of the royal princesses, for women played a more important part in Egyptian life than among the Oriental nations (fig. 111). The figures of persons of lower rank were never of colossal size like those of the Pharaohs. The latter wear an especial dress, and on their foreheads is the asp, a symbol of their immortality. In the temple reliefs the king is always larger than life size. He is a superior being taking part in a battle of pygmies, so small are his soldiers and those of the enemy in these reliefs. Even the horses drawing his chariot are of exaggerated size, reflecting the supernatural character of their master.

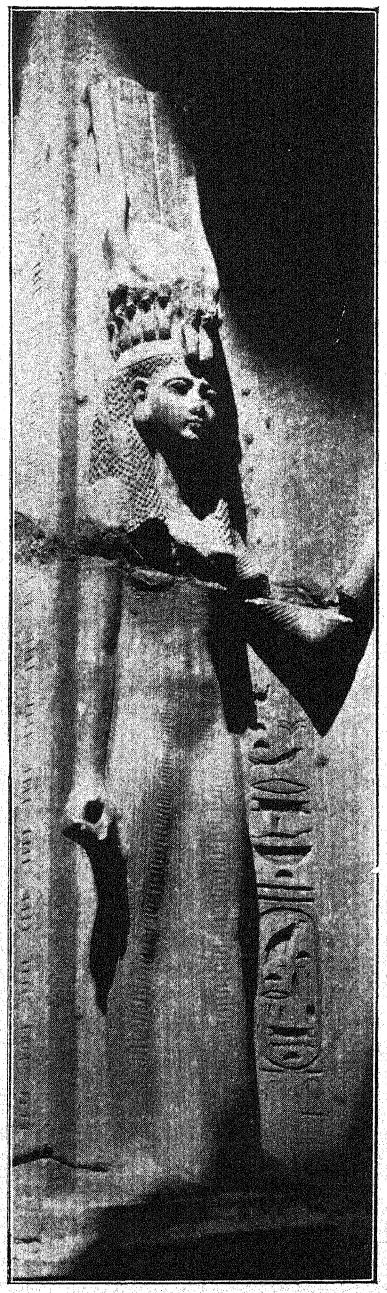


Fig. 111. — Queen Nefertari. Luxor.

This custom of endowing gods and heroes with an enormous stature is common to all primitive peoples. Egypt had not yet learned that the hierarchy of the gods should be distinguished rather by their moral superiority, by the noble features and superhuman majesty seen in the works of the Greeks.

The religion of dynastic Egypt required the representation of animal forms as well as human, for many of their gods assumed the shapes of animals, such as the cow, the owl, the hawk and even the cat, all reminiscent of the prehistoric tribal cults. The sculptors of Thebes were, therefore, obliged to study the

Fig. 112. — Group of Amenophis II and Hathor in the centre of a chapel.

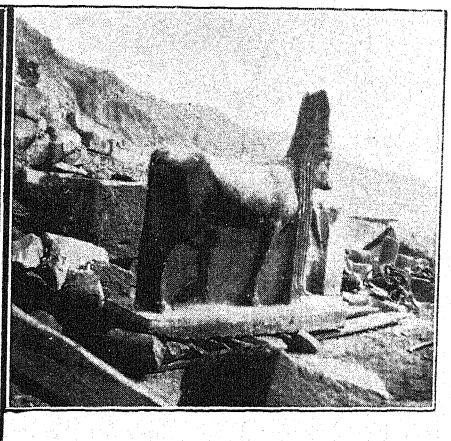


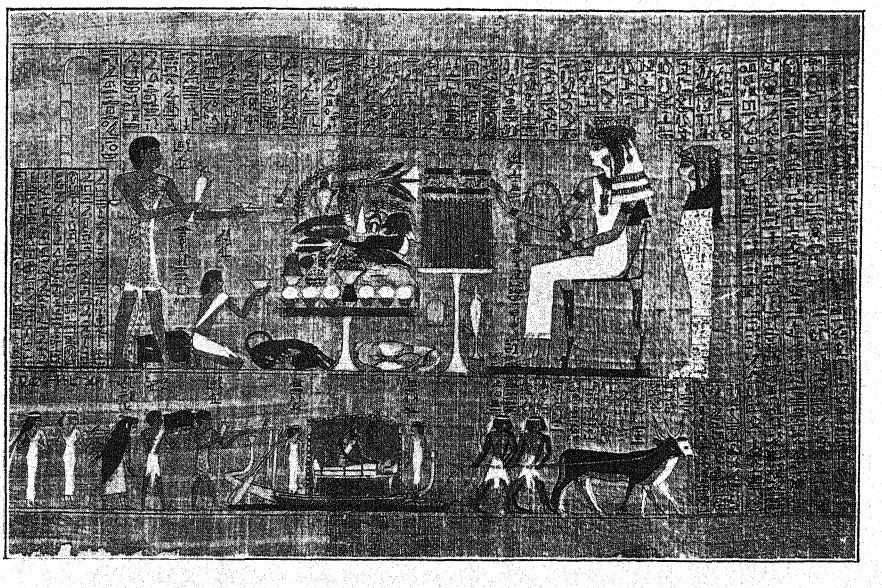
Fig. 113. — The cow, Hathor, being transported to the Cairo Museum.

forms of the divine companions of Ammon who peopled the Egyptian Pantheon. Their animal figures are admirable, whether carved from precious materials, or from the hardest rocks such as granite and basalt.

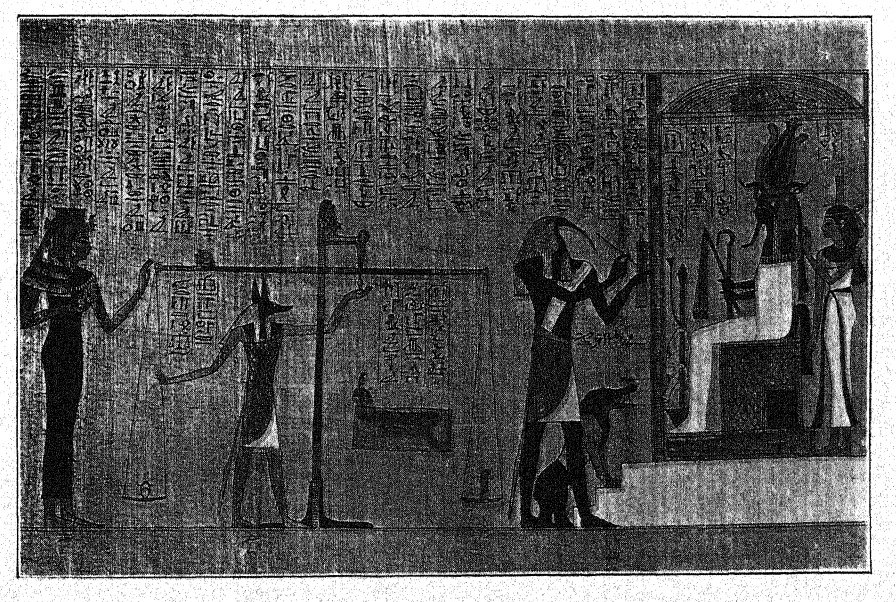
Only a few years ago the most important sculptural monument of the Theban schools was discovered. This was a group of Amenophis II and the goddess Hathor, the incarnation of the moon in the form of a cow. She it was who met the dead on their way to the Nether World and rejuvenated them with the milk of immortality. The king appears as a worshipper of Hathor, standing beneath the head of the goddess. On the same block we see a side view of him upon his knees absorbing the life-giving fluid from her udders. Lotus stalks rise from the ground to the neck of the cow, recalling the plants of the deep marshes in which she appears to the souls of the dead. The head of the cow has been justly estimated to be one of the finest works of Theban art. The nostrils seem to breathe with an ineffable calm, and in the eyes is the expression of the animal mingled with an almost human tenderness. (Plate IX.)

The cow, Hathor, is also found in a chapel, the ceiling of which is covered with paintings similar to those on the walls of the temple of Der el-Bahri (figs. 112 and 113). It is carved from a block of yellow limestone and the entire group is polychrome.

The paintings on the tombs of the royal necropolis give us a wide range of scenes from domestic life in Egypt. There are genre pictures of singers and dancers, children, weddings, and most frequently of all, funeral ceremonies. In the temples are paintings of national festivals in celebration of the victories of the kings, of scenes from civic life and of court ceremonies which supplement the relief sculptures (figs. 114 and 115).



Papyrus, Book of the Dead. Funeral offerings.



Papyrus, Book of the Dead. The judgment of the soul.

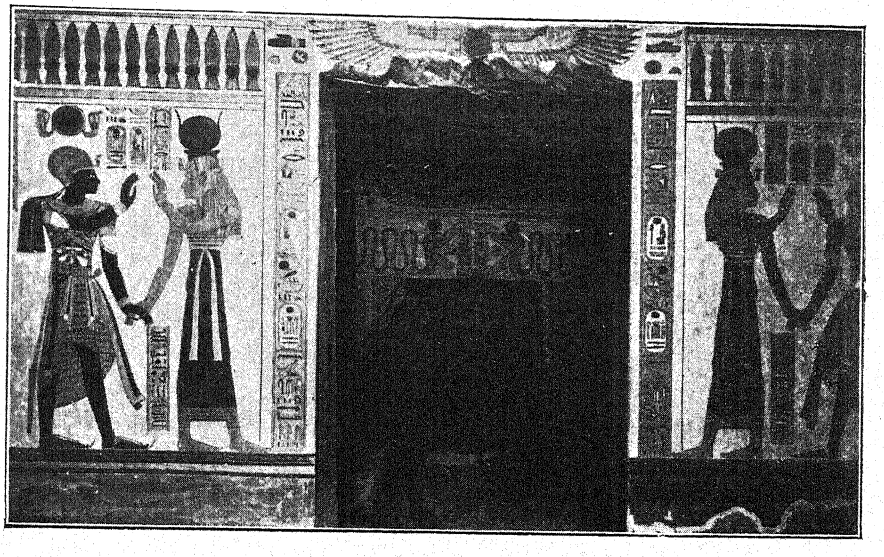


Fig. 114. — Tomb of the son of Rameses III. THEBES.

Egyptian painting of another king is to be found in the so-called Book of the Dead. This is not a single book, but it means the large papyrus rolls which were buried with the mummies. These contain instructions for the journey to the other world, illustrated with miniature paintings of the funeral and of the various ordeals and judgments which the soul must undergo before it might receive the rewards or punishments of the life beyond the grave. (Plate X.)

Summary. — The kings of the Eleventh Dynasty moved the capital to Thebes, situated in Upper Egypt. Here in place of the pyramid tombs with their temples, they excavated long galleries in the cliffs leading to a burial chamber decorated with paintings. The worship of the deified kings was carried on in a temple at the foot of the hill on the plain beside the Nile. On the opposite bank was the city of Thebes with its enormous

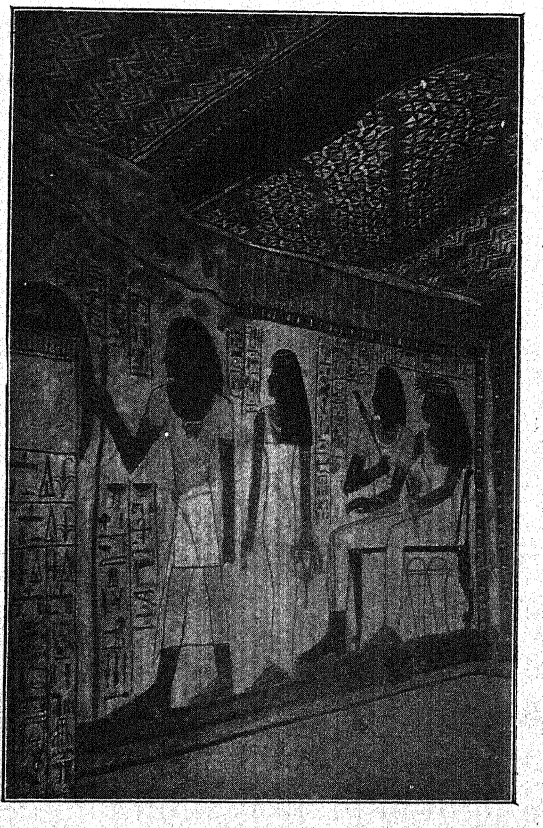


Fig. 115. — Tomb of a princess. THEBES.

temples, those of Karnak and Luxor. The plan of the Egyptian temple was complicated by numerous additions by a long line of Pharaohs. Nevertheless, three essential elements are to be found in every Egyptian temple, a forecourt, a ceremonial hall and the naos in which was the shrine containing the image of the god. The temple is approached by an avenue of sphinxes and is shut in from the outside world by a double wall. Every part of the temple, especially the hypostyle, or ceremonial hall, is decorated with polychrome reliefs in brilliant colors. These reliefs disregard the architectural lines of the building and are even carved upon the fusts of the columns. The structural technique of the Egyptian temples is poor. Architectural styles can not be chronologically classified, although certain dynasties displayed a preference for especial types of columns such as the palm-tree capitals and the Osirian pillars with figures of Osiris in the reign of Rameses II. Portrait sculptures are remarkably well executed and certain figures of animals are very fine, such as the cow, Hathor, of Der el-Bahri.

Bibliography. — The *Description de l'Egypte* is a monumental work. LEPSIUS: *Denkmäler aus Egypten*, 1845. An old manual is PRISSE D'AVENNES: *Histoire de l'Art égyptien*, 1879. — MARIETTE: *Karnak, Abydos*, etc. — PERROT ET CHIPIEZ: *Histoire de l'Art dans l'Antiquité*. — W. SPIEGEBERG: *Geschichte der ägyptischen Kunst*, 1903. — L. BORCHARDT: *Zur Baugeschichte des Amonstempels von Karnak*, 1905. — FLINDERS PETRIE: *Six Temples at Thebes*, 1897. — On the tombs of Thebes. NAVILLE: *The XIth Dynasty Temple* and *The great Temple at Der el-Bahri*, 1907. — DAVIES: *The Tombs of the Queens*. — On the restoration of the temples: *Annales du service des antiquités de l'Égypte*, I-VII. On statuary and Egyptian art in general: *Mémoires* and *Bulletin de l'Institut français d'archéologie orientale. Catalogue générale du Musée du Cayre*. 27 vols. in folio. — GEORG EBERS: *Egypt*.

Periodicals. — *Revue d'égyptologie*. Paris. — *Recueil des travaux relatifs à la Philologie et à l'Archéologie égyptiennes et assyriennes*. Paris. — *Revue de l'Art ancien et Moderne*. Paris. — *Mémoires de la Fondation Piot*. Paris. — *Zeitschrift für ägyptische Sprache*. Berlin. — *Bulletin de l'Institut Egyptien*. Cairo.

Fig. 116. — Portrait of Rameses II. *(Museum of Turin.)*

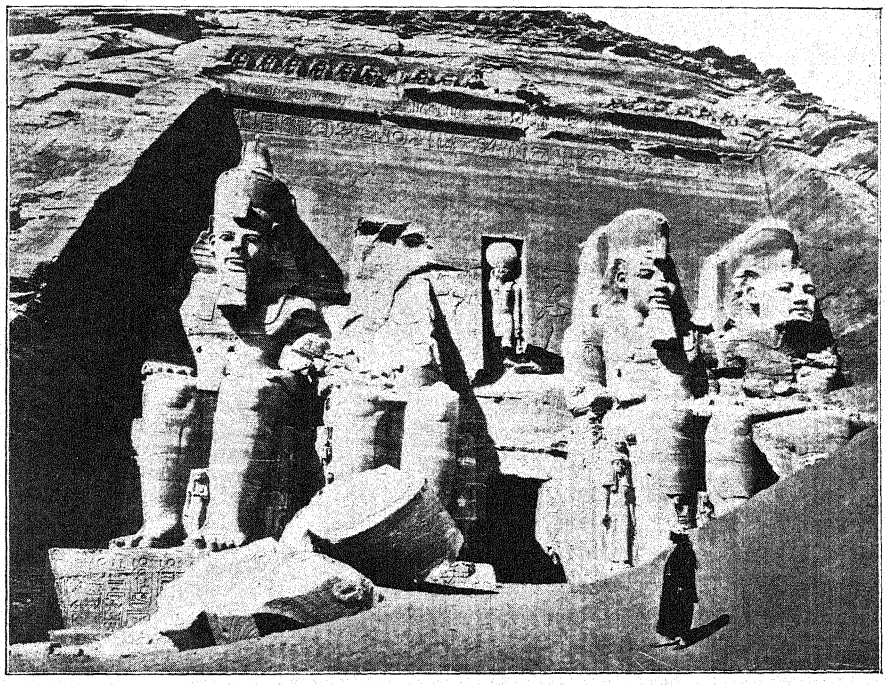


Fig. 117. — The great speos at Abu-Simbel. NUBIA.

CHAPTER V

THE TEMPLES OF NUBIA. — SAITE ART. — THE MINOR ARTS IN EGYPT.

EGYPT, says Naville, "is not a nation with its capital in its midst, nor yet is it a state lying round about a city. It is rather a population extended along a river". The desert on either side of the Nile valley did not lend itself to colonial expansion. Consequently, the only direction in which the country could increase its range of action was up the valley into Nubia and even into the Sudan. This newer Egypt beyond the first cataract was occasionally menaced by the turbulent tribes of the country, but for the most part the military detachments sent to guard the country enjoyed a degree of peace and security which permitted the erection of those magnificent temples which year by year are attracting greater numbers of tourists up the Nile and even to Khartum. The other colonies of Egypt were not very permanent, and Nubia was the only land in which the armies of the Pharaohs left behind them monuments of impor-

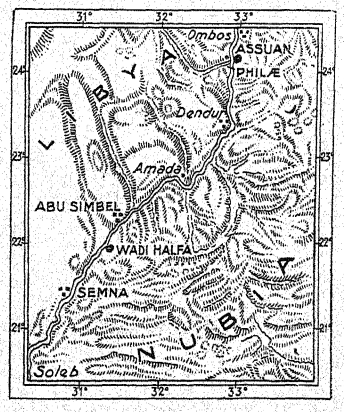


Fig. 118. — The Nile valley in the Nubia.

tance. Indeed, we can hardly attach much significance to the military stelae which the Pharaohs set up in Asia as a record of their occupation of the country. Almost every year, while the great Theban dynasties remained in power, a force of chariots and light cavalry crossed the Isthmus of Suez into Asia for the purpose of collecting tribute and chastising rebels in the provinces subject to Egypt. We find frequent references to such expeditions in the Bible, and for a long period the kingdoms of Syria and Palestine trembled at the approach of Pharaoh's hosts. Jerusalem was long obliged to suffer the presence of an Egyptian garrison within her walls, as was Damascus and all of Syria as far as the Euphrates and the mountains on the Hittite border. On his return from these raids the Egyptian king would leave along the route of his army a number of carved inscriptions and reliefs commemorating his exploits. Often a lack of Egyptian sculptors made it necessary to employ the sculptors of the country. The stelae of Rameses II near Beirut are an excellent example and are probably the earliest monuments of Egyptian domination in Asia. Although they follow the Egyptian style to a certain extent, the figures upon them show plainly that they were executed by Asiatic workmen.

But a time came when Egypt encountered a formidable rival in the easy exploitation of these Oriental nations. This was Assyria which robbed Egypt of her Asiatic provinces in order to exploit them herself. As the power of the kings of Assyria increased, the Egyptians retired to the valley of the Nile. They were put more and more on the defensive, until at last the chariots of Assur crossed the Isthmus in their turn, and Thebes itself fell a prey to the mighty lord of Nineveh. Nubia, it is true, lay beyond the reach of these Asiatics, but it was threatened by the outlying tribes of the country and the negro peoples of the Sudan. Here the temples are hewn from the native rock; whether it was to protect them from barbarian raids, or because of the scanty margin between the Nile and the cliffs, it is hard to determine. Nubia was lost from the time of the Sixth to the Tenth Dynasty and conquered again by the Pharaohs of the Middle Kingdom. It regained its independence during the reigns of the Hyksos or Shepherd Kings, but the rulers of the Eighteenth Dynasty consolidated the gains of their predecessors and extended the frontier as far as Napata and the high table-lands of Ethiopia. It was natural that a country so liable to relapse into barbarism should require temples that could not easily be destroyed by an uprising inspired by local patriotism or religious enthusiasm. The advantage of a series of chambers excavated from the solid rock was, that although they might be violated and wrecked, they could easily be restored in a short time and painters and sculptors could repair the damage caused by the occupation of the barbarians.

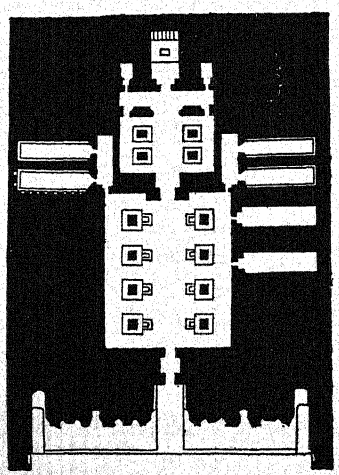


Fig. 119. — Plan of the great speos at Abu-Simbel. NUBIA.

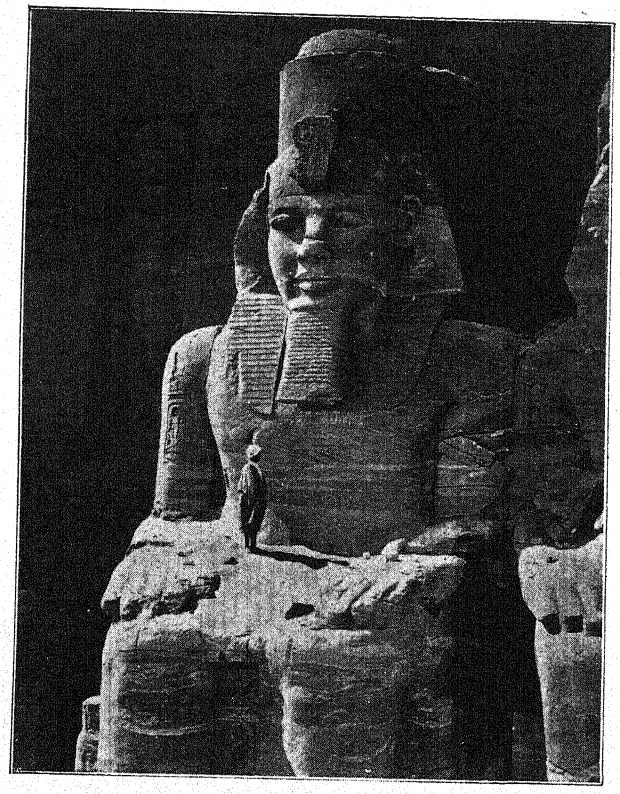


Fig. 120. — One of the colossi of the great speos at Abu-Simbel.

In cities like Napata and Meroe, where the temples were protected by strong military forces and there was an Egyptianized population interested in their preservation, they were constructed of blocks of hewn stone like those of Egypt, although it was necessary to transport the materials for a long distance. But often the soldiers of the Pharaohs felt the need of dedicating a temple to the gods who had favored them in their conquests, and in the unpopulated portions of the Nile valley it was considered safer to excavate it from the native rock of the hill. Like the Roman legionaries of a later age, the Egyptian veterans laid aside their arms for the pick and mattock and hewed from the solid granite those extraordinary monuments which still bear witness to the domination of Egypt in far-off Ethiopia.

The rock-cut temples of Nubia still bear the name, *speos*, by which they were known to the ancient Greeks. The great speos of Abu-Simbel was made to commemorate the victories of Rameses II over the negro tribes of the south and the cities of Syria, and the four gigantic monolithic statues at the entrance to this temple produce an impression upon the traveller never to be forgotten (figs. 117, 119 and 120). Among the rock-hewn Nubian temples, the great speos of Abu-Simbel stands out as does the hypostyle hall of Karnak among the stone temples of Egypt. Rameses II was the greatest of the builders of Egypt. According to the Greeks, he erected a temple in every city and he did not neglect his Nubian colony which was really an extension of Egypt itself. On the rocky slope above the smooth waters of the Nile rise these seated colossi, immovable granite figures over sixty feet in height. On either side of the entrance two small figures in relief represent the great king in the act of worshipping Ammon. The doorway leads to the interior of the temple which is not unlike the great religious structures of Thebes in its arrangement. There is a hall supported by

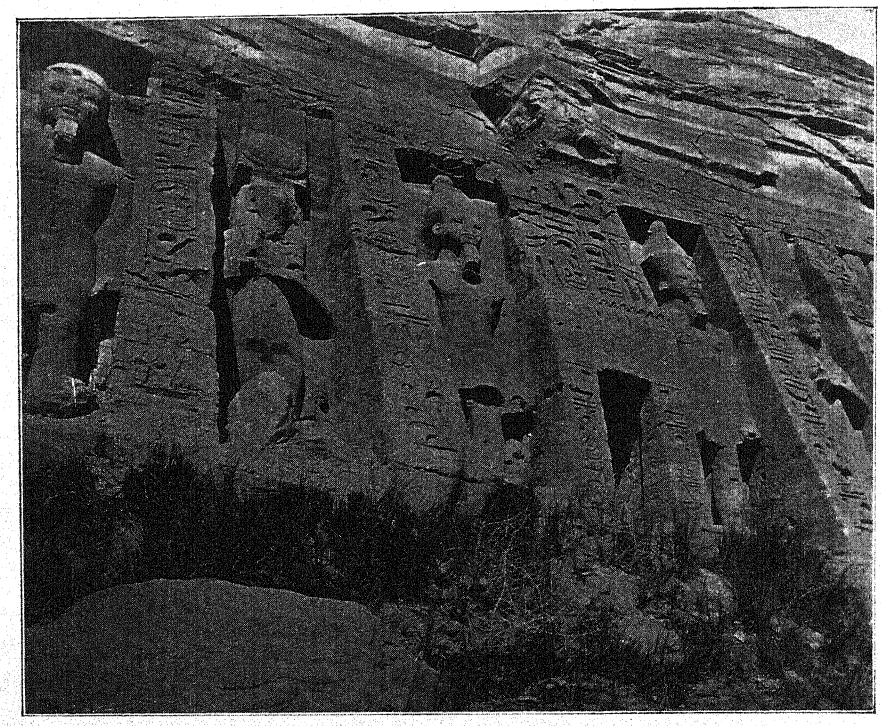


Fig. 121. — Façade of the small speos of Abu-Simbel. NUBIA.

monolithic Osirian columns like those of the Ramesseum on the Theban plain. We then pass into a second apartment which takes the place of the hypostyle hall, and a third chamber beyond which was the holy of holies. Six chapels are distributed unequally on either side.

Above the great speos of Abu-Simbel is another temple of the same type called the small speos because it does not compare in size with the other. Here, too, we find four representations of the king, but these figures are standing and alternate with two colossal statues of the queen. The latter is deified and bears the attributes of the goddess Hathor who was the Egyptian Venus (figs. 121 and 122). The arrangement of the small speos is simpler, but it preserves the three essential elements of the Egyptian temple, the outer portico, the ceremonial hall and the sanctuary, all cut from the native rock. These subterranean temples must have been illuminated artificially, for but little light could be admitted from the doorway.

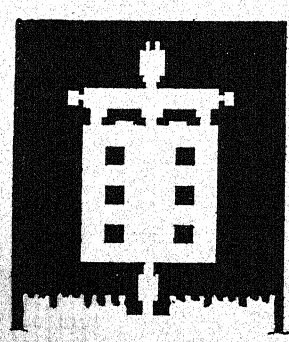


Fig. 122. — Plan of the small speos of Abu-Simbel.

Far along the Nile extend these great memorials of the rule of the Ramessids. In spite of their long practice in cutting out the galleries leading to their tombs in the rocky hills of Egypt, this work required

the expenditure of much time and money. But not all the temples of Nubia were hewn from the rock; sometimes only half of the structure was excavated in this manner, and the outer half is built of masonry. In this case they are called hemispeos, half speos and half detached, and are usually found on sites where the valley of the Nile is sufficiently wide to allow room for an impressive monumental structure. The hemispeos of Garf Husên near Amâda is the most complete of all and resembles the ordinary Theban temple. The valley of the river is wide enough here to contain all its architectural features. An avenue or *dromos* with its double row of sphinxes leads to the first pylon. Beyond is a court flanked by a colonnade on either side, the pillars of which are the same Osirian columns found in all the temples of the Ramessids and which are almost characteristic of the period. The hypostyle hall follows with its higher central pillars and accompanying Osirian figures, and we finally come to the only portion which was excavated from the rocky hill, the holy of holies with three chapels behind it (fig. 123).

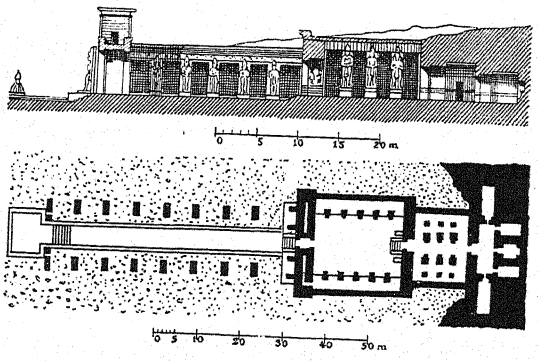


Fig. 123.—Hemispeos of Garf Husên. *(Perrot and Chipiez.)*

We see, therefore, at Garf Husên the traditional features of the Egyptian temple reproduced in this distant colony with but little variation. But along the Nile in Nubia we find numerous other temples, now half destroyed, with certain characteristic peculiarities. Many of them consist of a nucleus of inner rooms

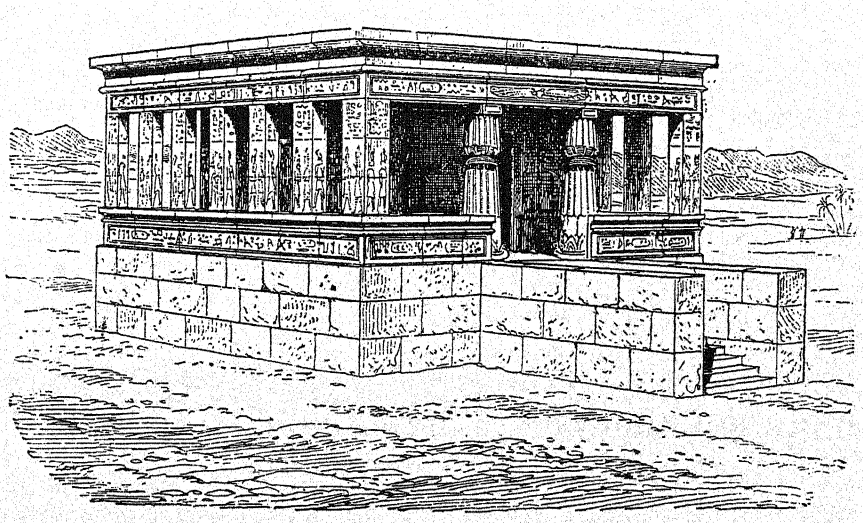


Fig. 124.—Restoration of the temple of Elephantine. *(Perrot and Chipiez.)*

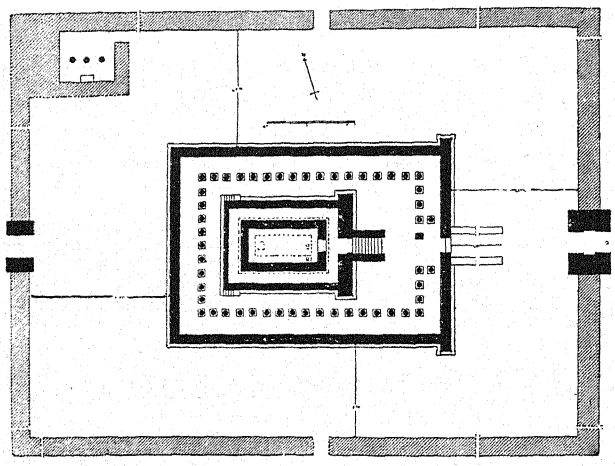


Fig. 125. — Plan of the temple of the Sun at Meroe. *(Garnstang.)*

surrounded by an external colonnade, a type of which but one example exists in all Upper and Lower Egypt. This is the famous temple of Elephantine on the Nubian frontier near Assuan (fig. 124).

This temple was discovered on the island of Elephantine near Assuan on the Nubian frontier by the French scientists who accompanied Napoleon. The results of their investigations were published in their "Description de l'Égypte", which included the plan, measurements and views of the ruins. A few years later it was destroyed by the Turks in order to secure building material, so these drawings are all that remain to us of this remarkable building. The restoration made by Perrot and Chipiez from these plans and sketches gives us some idea of this temple, the only one of its sort known up to that time. The scientists attached to Napoleon's expedition did not go beyond the First Cataract; if they had been able to study the temples of Nubia, this rectangular structure would hardly have appeared so strange to them.

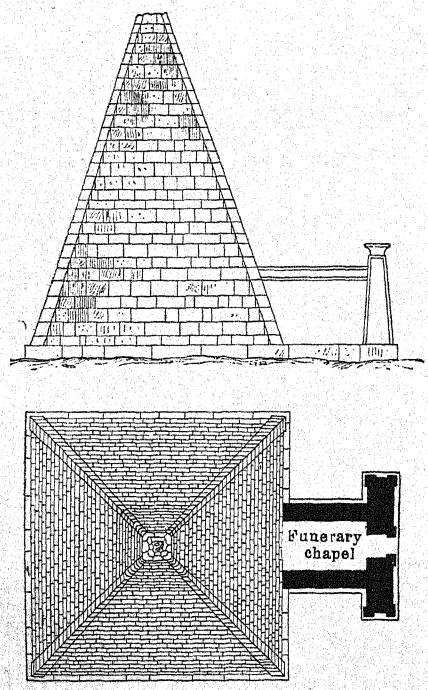


Fig. 126. — Pyramid at Meroe.

At Napata, the capital of Nubia, the Egyptian temples differ somewhat from those of Thebes. The English occupation of the Sudan, which has afforded to that locality a degree of security hitherto unknown, has permitted the exploration of these ruins. Under the Egyptian dynasties Napata was a sort of fief of the high priest of Karnak, and when the Theban priesthood fell out with usurping Pharaohs of the Twenty-Second Dynasty, the high priest retired to his Nubian possessions. Meroe, the second capital of Nubia, was explored in the winter of 1909 by Professor Garnstang of the University of Liverpool, sent out

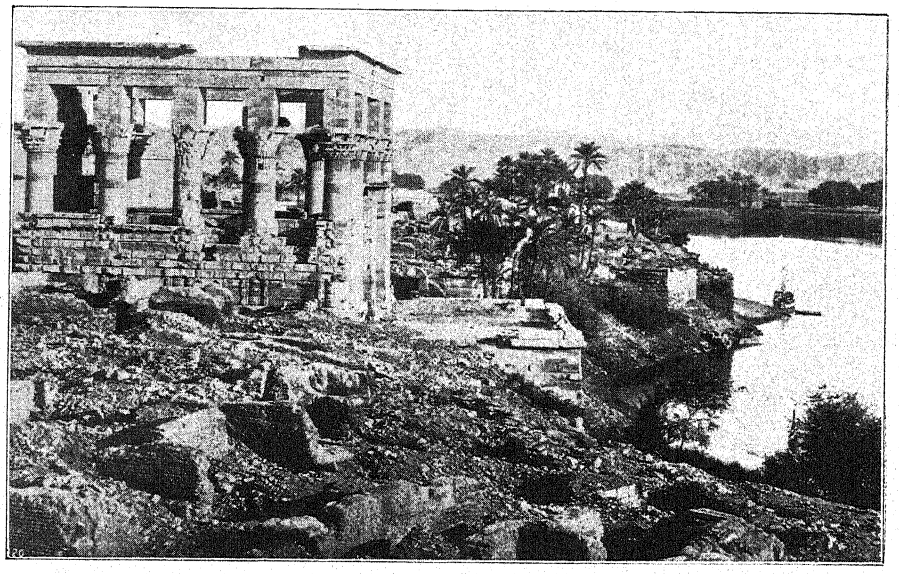


Fig. 127. — View of the Island of Philae before the construction of the Assuan Dam.

by Professor Sayce. The temples of Meroe are Egyptian in character, it is true, but their reliefs, with other sculptures and architectural features, display a local artistic development which was derived from the Egyptian styles. The plan of the temple is different also; we do not find the characteristic arrangement of the Theban temples with their succession of courts and hypostyle halls. One of the principal buildings appears to be a temple of Ammon which closely resembles the temple of Elephantine with its exterior colonnade. Another temple, dedicated to the sun, is set within a double enclosure. About the inner wall is a colonnade surrounding the temple (fig. 125).

Strangely enough, we find in Nubia all the architectural styles of ancient Egypt down to Christian times. There apears to have existed a deliberate intention to follow so far as possible the old culture which had so long flourished in this country. The Nubian kings were even buried in pyramids like the Pharaohs of the first dynasties. While the Ptolemies reigned in Alexandria, the kings of Nubia were still building the pyramids of Jebel Barkal near Meroe. They are, however, sharper and more slender than the ones at Memphis and other cities of the Old Kingdom (fig. 126).

The pyramids of Meroe still have the funeral chapel, a relic of the early temple dedicated to the deceased king. The remains were entombed in the pyramid itself which is of masonry and set upon a foundation of rectangular blocks of stone. These pyramids were explored in the first part of the last century by Ferlini, who discovered the mummies and jewels which they contained, but a more complete study of these monuments has been made by the above mentioned mission of the University of Liverpool.

This strangely persisting taste for the types of a bygone age is seen on a

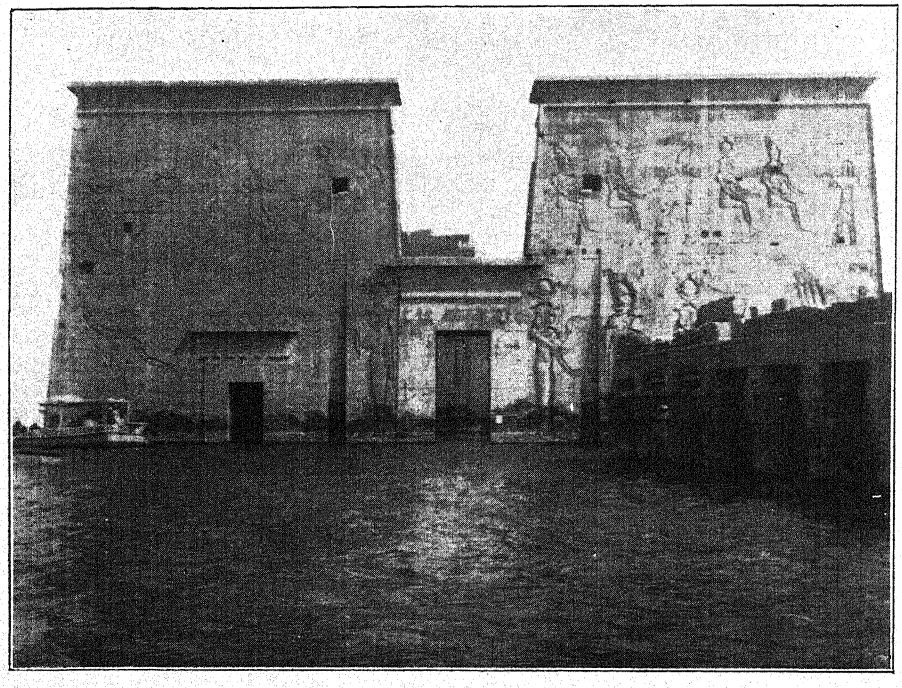


Fig. 128. — The great temple of Isis at Philae half submerged by the waters of the Assuan Dam.

larger scale in Egypt itself in the time of Psammetichus, the Restorer. Egypt had recovered her liberty after a long Assyrian occupation and had reestablished a native dynasty on the throne. The capital was again transferred to the Delta because it was necessary for the king to be near the Asiatic frontier where the isthmus was the danger-point. Sais was chosen as the capital, and the art of this period is consequently called Saite art. Thebes remained almost deserted, for a large part of its population had gone to the new capital. Some portions of the city were abandoned completely and the hamlets around the great temples were practically all that was left of the ancient metropolis. The efforts of the new Pharaohs to restore the ancient monuments were not sufficient to revive the old spirit which was gradually dying out. Psammetichus erected a pylon at Karnak, it is true, but Thebes remained little more than a national museum filled with memorials of an illustrious past down to the times of the Roman Emperors. Later still, the Thebaid became the favorite resort of the Christian anchorites attracted there by its desert solitude.

In the Delta, however, Psammetichus set up a new Egypt on the ruins left by the Assyrian conquerors. He brought peace to a population weary of war, restored roads and canals, repaired the ancient monuments and encouraged art in every way. At Memphis he built the portico of the temple of Ptah and the great stable where the Apis bull was kept. As the Serapeum, or sepulchre of the Apis bulls, had been partly destroyed, he ordered his architects to open new galleries in a more solid stratum of earth. But except for the Serapeum,

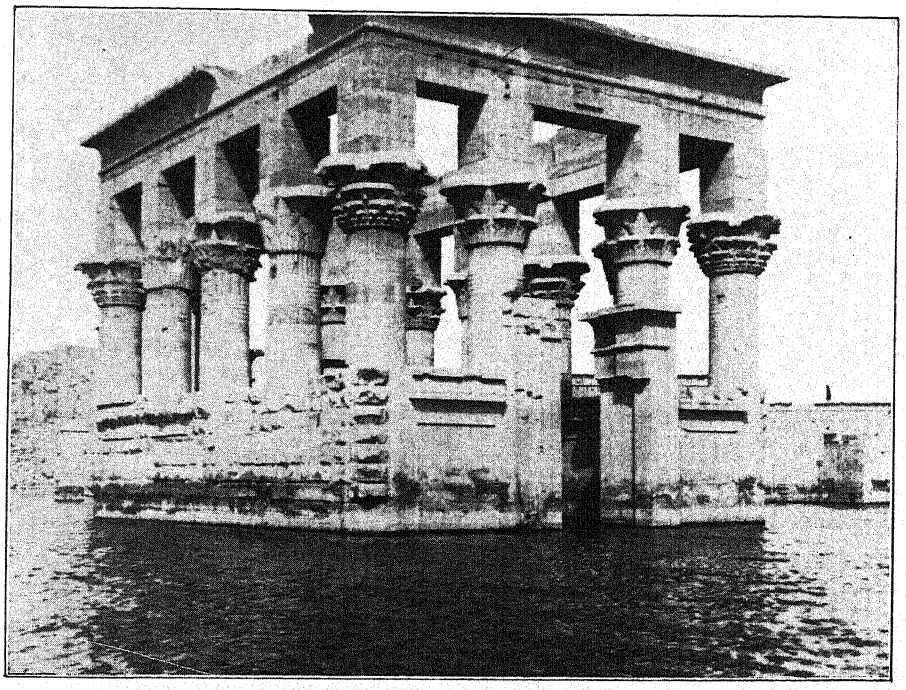


Fig. 129. — Island of Philae. One of the Kiosks.

discovered by Mariette, we know little of Sais, the last capital of the Pharaohs, and even its site is only vaguely known.

Fortunately, some splendid buildings of the Saite period have been preserved in the south of Egypt near the Nubian frontier on an island in the river above the First Cataract. The level of this natural dam at Assuan has been raised by British engineers in recent years, and a vast reservoir has been created to supply water in times of drought. The charming rapids near the cataract have disappeared and above the water only the tops of the palm-trees and the highest portions of the submerged temples can be seen.

An island in the rapids of the Nile was said by the priests to be the site of one of the tombs of Osiris. Many temples were built here, and the island became one of the most sacred spots in all Egypt. The scientists attached to Napoleon's Egyptian expedition, who were the first to study these structures, described the marvellous scenic effect produced by this island: "Ascending the road cut through the rock for the ancient pilgrims and coming out above the cataract, the Island of Philae is seen in all its glory. Great monuments surrounded by trees, the rushing waters of the river and the green clad shores create a picture which is the more pleasing for its contrast with the arid valley below" (fig. 127). The pardonable pride of these scientists who accompanied Napoleon is betrayed in the following lines written after they had studied the Greek and Latin inscriptions and graffiti upon the temples of Philae: "Near these inscriptions above the gateway of the pylon is another which shall immortalize in centuries to

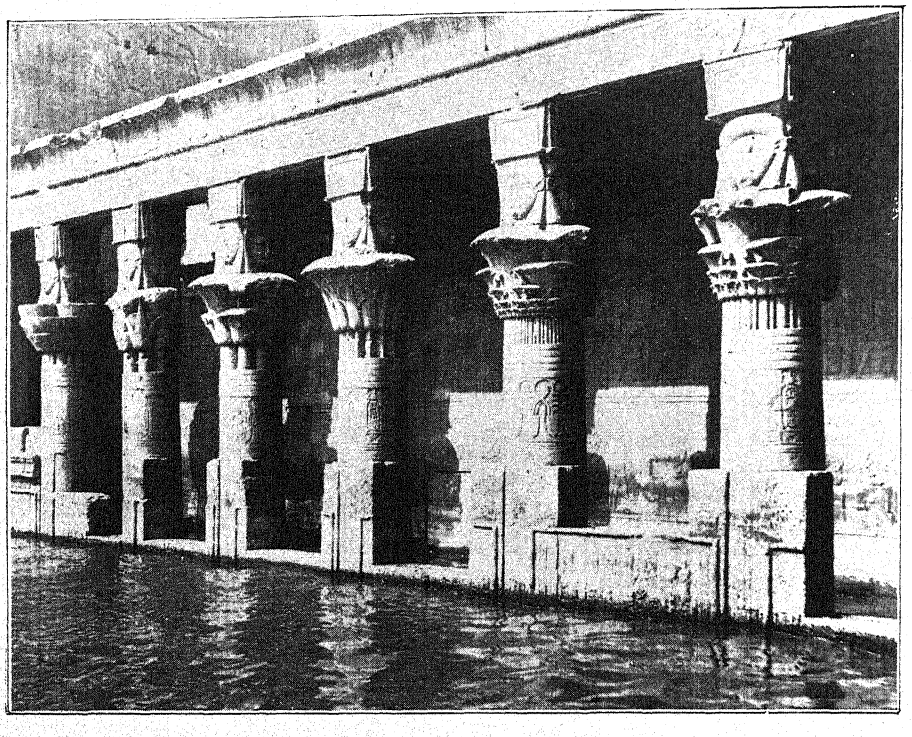


Fig. 130. — Portico of the Temple of Philae.

come one of the greatest events of our time. It commemorates the conquest of Egypt by General Bonaparte, the pursuit of the Mamelukes by General Desaix beyond the cataracts and the entry of the victorious French into the Island of Philae. Another inscription within the temple, carved at the same time and by the same hand, records the precise geographical position of this island. These two monumental inscriptions bear glorious witness to the valor of the armies of France and to her scientific achievements. This association of science and arms shall not be the least of the glories of the great general who has undertaken the conquest of a country submerged in barbarism only to bring to it the light of civilization."

The largest of the temples on this island, and indeed it covers the greater portion of its area, is not the most interesting to us in the present connection, for it was either constructed or rebuilt under the Roman protectorate. Although it presents all the characteristics of the earlier Egyptian temples, its plan and style differ little from those of the great temples of Thebes. But at either end of the island is a beautiful structure, the work of the last Egyptian dynasties. One is called the Kiosk of Nectanebes, and the other, Trajan's Kiosk (figs. 129 and 130). They are really landing-places or open kiosks and consist of colonnades of exquisite charm. They are the work of late artists and are without precedent in Egyptian architecture, a remarkable evidence of that originality inherent in Egyptian art which endured even after a native Pharaoh

The kiosk of Kartassi, in Nubia.

sat upon the throne. The beautifully proportioned columns are reflected in the water beneath, and their pleasant shade is deepened by high parapets which leave only window-like spaces between the pillars. Let us picture in our minds the stairway leading from the water to one of these buildings; upon a platform midway, rises a graceful obelisk of granite, and above is the portico which catches every breeze from the water, and from which we get a view of the broad river strewn with islets. Unfortunately today the water rises halfway up the columns and only the top of the submerged obelisk shows above the level of the dam. Oarsmen now row their boats into the kiosk itself, and the damp walls are coated with slime from the muddy waters of the river. Philae is dead, and the monuments of the last dynasty of the Pharaohs may some day be completely lost to sight when the level of the great dam is raised as now planned by the English. These graceful temples of Philae are unique in Egyptian art, as we see from the kiosk at Kartassi. This is above Philae in Nubia, but its style and character are the same. (Plate XI.)

Fig. 131. — Portrait of Philip, Alexander's successor in Egypt, carved on the walls of Karnak.

These Saite kiosks have a grace and lightness of proportion that is not found in the old temples of Thebes. In other buildings the Ptolemies, the kings of the last Egyptian dynasties, sought to imitate their forebears in the erection of colossal monuments of exaggerated size, but these monstrous efforts were anachronisms. The centuries that had passed could not be annihilated, and Egypt had been too long in contact with peoples who possessed a better sense of proportion.

The power and aggressive spirit of the Pharohs of the Empire had vanished forever. The magnificence of Tethmosis, Seti and Rameses were no longer possible, so in her last years Egypt turned to the simple ideals and peaceful habits of the first dynasties, when the nation lived content and the lust of conquest was unknown. The art of this Saite period and that of the Ptolemies turned to the past, and the oldest styles were the most favored. On the walls of the burial

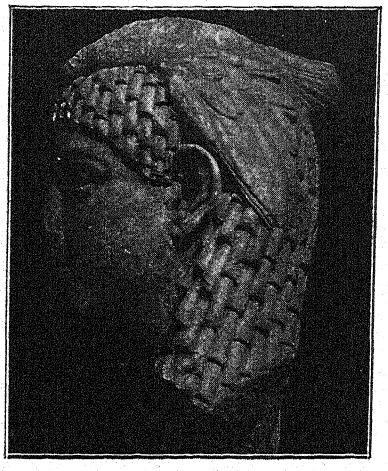


Fig. 132. — Portrait of a Saite princess. *(Vatican Museum.)*

chambers of the wealthy they carved scenes copied from the ancient mastabas, just as though they still lived in the times of the builders of the pyramids. But the interpretation of these old types was another thing; an elegance crept in that belonged to a later age. It was characteristic of the reliefs of the Saite kings and the Ptolemies that when they were carved on the old temples it was necessary to restore the surfaces of the walls built in times long past (fig. 131 and Plate XII).

The official sculptures of the Saite court were carved preferably from the hardest materials such as red granite and green porphyry. The outlines are simple, and the postures, hieratic like those of the first dynasties. A rigid conventionality is preserved and the folds of the garments are suppressed. The figures are enveloped in a closely fitted mantle which outlines every rounded form. The statues of Osiris in the Cairo Museum are of this sort and dressed like the kings of old. In his hands are seen the symbols of his power, and on his head is the double crown of the ancient kings, a custom which had long fallen into disuse (figure 134). A queen of this dynasty wears on her head the horns and the moon-symbol of Hathor, the Egyptian Venus (fig. 135). We see the same softly rounded forms in the bronze statuette of a lady of Sais, now in the Museum of Athens (fig. 136). Takusit is her name, and her hair is arranged like that of the statues found in the tombs dating from the first years of the Middle Kingdom, when the traditions of predynastic times were not yet forgotten. Yet there is a novelty about the figure that is charming, and we see the refined elegance of a mature civilization in its appeal to the senses. All

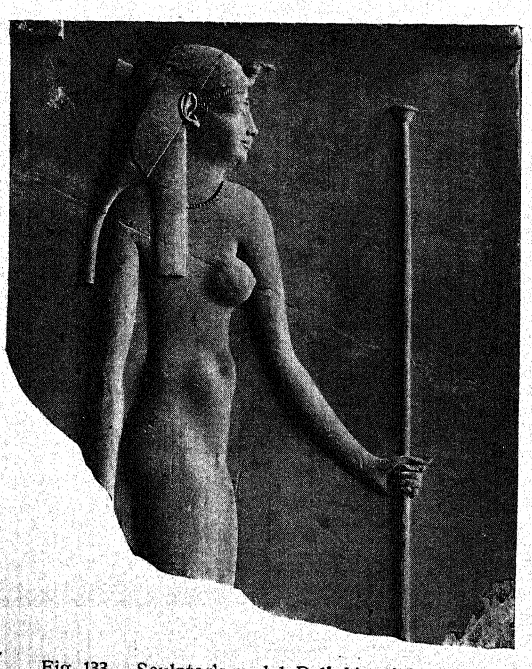


Fig. 133. — Sculptor's model. Relief in miniature of the twenty sixth dynasty. *(New York Museum.)*

Fig. 134.—Porphyry statue of Osiris. *(Cairo Museum.)*

Fig. 135.—Statue of a Saite queen wearing the symbols of Hathor. *(Cairo.)*

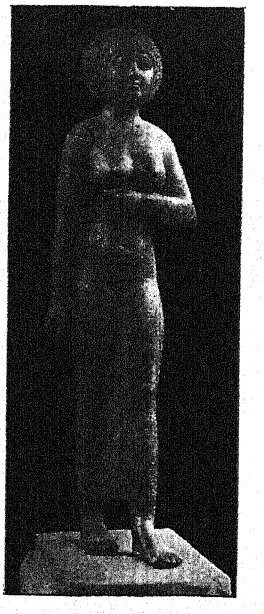


Fig. 136.—Small bronze of the Lady Takusit. *(Museum of Athens.)*

the sculptures of this period, other than commemorative monuments, produce the same impression (fig. 133). There is a Saite head in the Vatican Museum with the hair arranged in the traditional manner, and on it, a head-dress in the form of a beautiful bird with extended wings (fig. 132). The Egyptian artists of this period also carved graceful animal figures (fig. 137). "In the painting and carving of their hieroglyphics", said Maspero, "they achieved a high state of perfection, and large numbers of statues and bas-reliefs were produced. The Saite school was characterized by its elegance and its fine detail work. The hardest materials were softened by the purity of the style and its graceful simplicity." These were the true precursors of the Alexandrian artists who, in later years, displayed such a love for country life and pastoral scenes.

Another interesting sculpture of this period is a copy of the Hathor cow found at Der el-Bahri which was described in the last chapter. This Saite copy was well known and the Cairo Museum regarded it as a work of secondary importance and not especially interesting until the discovery of the original. Though of hard stone, it is nothing more than a refined dilettanti attempt, while the Der el-Bahri original, which is carved from soft limestone, is full of life and animation and possesses unusual charm.

Thanks to the dry climate of the country, the tombs of Egypt have furnished us with perfect specimens of practically all the articles which were buried with the dead, such as their jewels, table service, furniture and clothing. The viscera were deposited separately in large stone vases called Canopic vases.

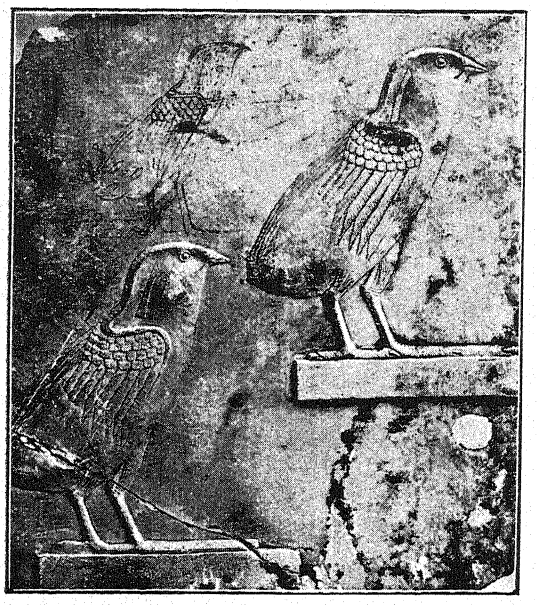
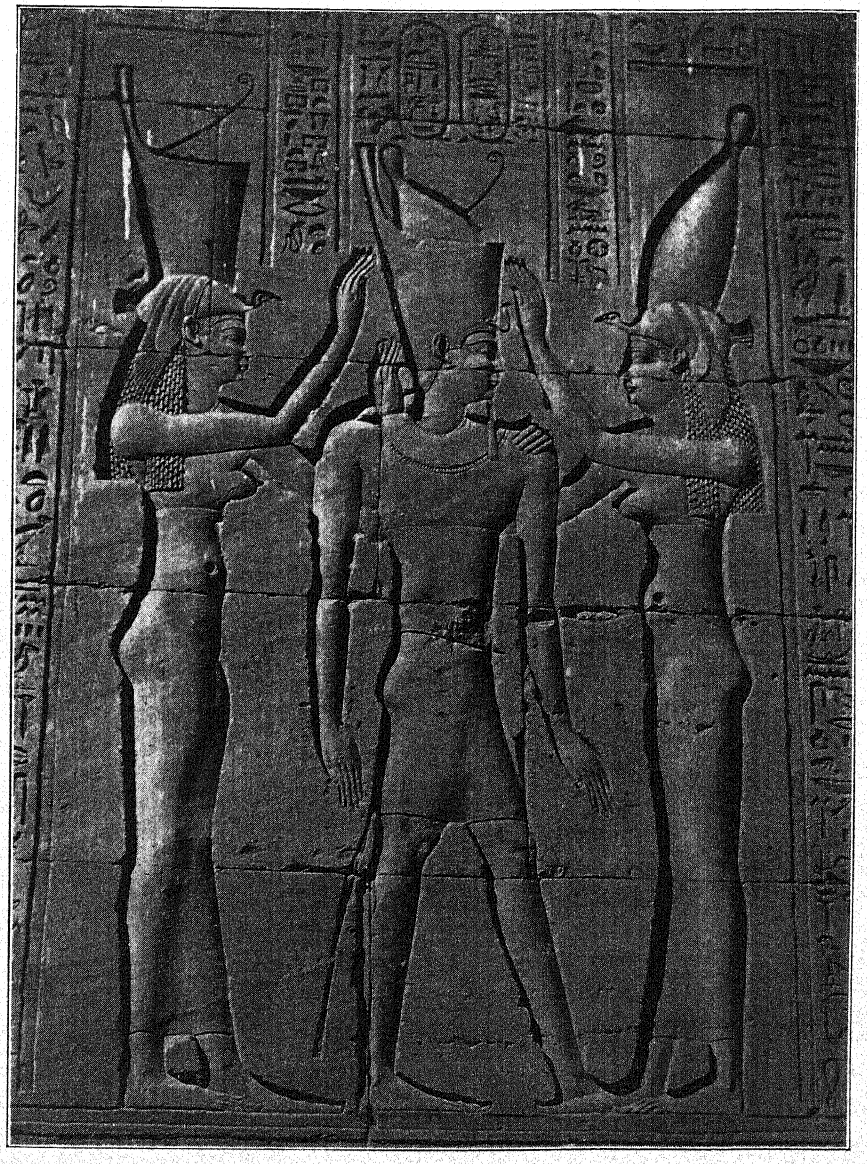


Fig. 137.—Sculptor's model. Small chickens. NEW YORK.

These were of graceful shape and covered with carved head (fig. 138). The personal belongings which were placed in the tomb with the body afford us a precise knowledge of the objects in common use, and we see in them the same taste and style which characterized the great monuments of Egypt. For decorative themes we find the inverted gola, the spiral moulding, the lotus-blossom and the papyrus flower. Some of these designs were so apt and beautiful that they were adopted almost without modification by the artists of Greece and Rome (fig. 139). Small glass and porcelain articles were imitated later by the Phoenicians and Greeks who carried them in their trading ships to every part of the ancient world. The great ladies of Rome vied with one another for the possession of Egyptian jewels, and the cases of the Cairo Museum contain spoils from the tombs that astound the visitor with their splendour. Rarely have the goldsmiths of Europe surpassed either in beauty or in workmanship these regal jewels. We see a happy combination of richness and taste in the elaborate necklaces found in the tombs. Strings of brilliant stones are interlaced with tiny figures of enameled gold, and larger suspended plaques alternate with mysterious scarabs. Ivory, too, was a favorite material. Maspero has translated the inscription on a stela in which one of the great kings of the Twelfth Dynasty makes the boast that "no one in the world surpasses myself and my eldest son in metal-

Fig. 138. — Canopic vases. *(Egypt Exploration Fund.)*



Ptolemy Philaretes crowned Pharaoh of the Upper and Lower Egypt. EDFU.

work of gold and silver, with precious stones and even ebony and ivory". So even the Pharaohs shared the enthusiasm of their subjects for the arts and crafts; indeed, the goldwork, glass and porcelain of Egypt were held in the highest esteem throughout antiquity (fig. 140).

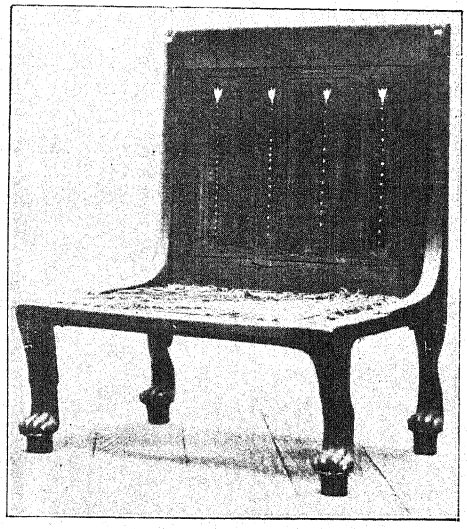


Fig. 139. — Egyptian chair. *(British Museum.)*

Egyptian ceramic was almost monochrome. It was coated with a greenish blue luster on which were skilfully outlined palms, lotus-blossoms and other flowers of the country. The Greeks prized very highly these small vases, many of which were modeled in the forms of animals. The Egyptians were also skilful metal-workers and were familiar with iron at a very early period. The lightness of their work is seen in an Egyptian war-chariot found in one of the tombs near Thebes and now in the Archaeological Museum of Florence. The recent sensational discovery of the tomb of Tutenkhamun has

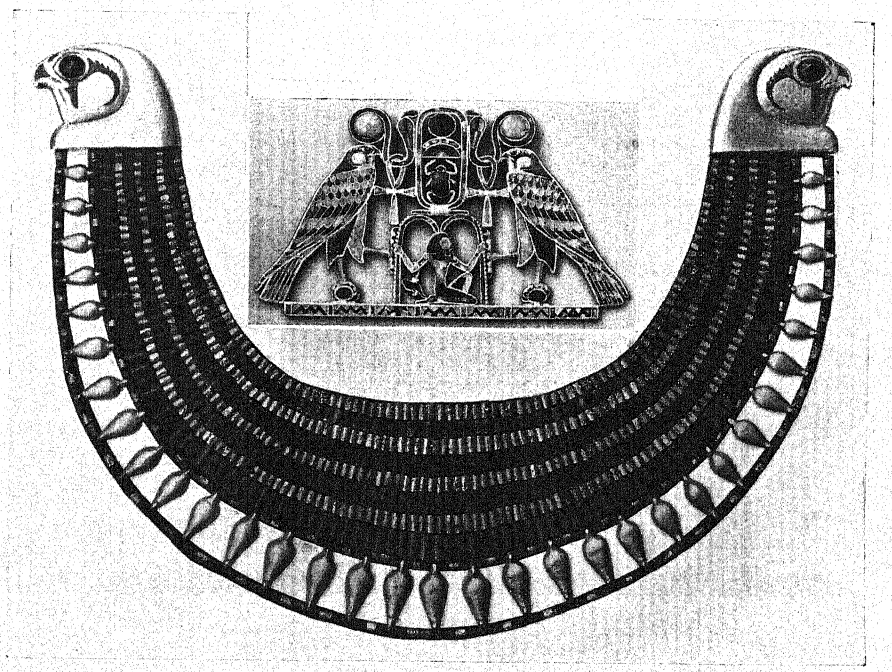


Fig. 140. — Egyptian jewels. *(New York Museum.)*

been the cause of more excitement than the facts really warrant. The unviolated tomb of the son-in-law and successor of Akhenaton has yielded nothing that has not already been found in other sepulchres less rich in funeral trappings. The most interesting thing is the vast quantity of articles with which it was filled. The royal furniture was unusually complete. It was rich and abundant, but it did not reveal an especially delicate taste, nor was there anything comparable with the exquisite reliefs in the tombs of the other Pharaohs. The ornaments and jewels do not show Tutenkhamun to have been an unusually refined or intellectual monarch. Since the discovery of his tomb, Tutenkhamun still remains the person he was previously believed to be. He was a soldier of fortune who married a royal princess, and he ascended the throne as the result of a counter-revolution directed by the Theban priesthood. But his thrones, couches and chariots, accompanied by the publicity given to archaeological discoveries today, have made the world more familiar with ancient Egyptian styles than have other works of art possessing a much greater artistic merit.

Summary. — Egypt's only real colony was Nubia, situated in the valley of the upper Nile. The arrangement of its buildings is somewhat different from those of Egypt proper. Many of its temples were excavated from the native rock, others consist of rooms surrounded by a colonnade on all four sides. The rock-cut temples are called *speos*, and the largest of these are found at Abu-Simbel. Of the temples surrounded by colonnades, the best known is that of Elephantine, but there are others at Meroe, the capital of Nubia. A last renaissance of Egyptian art occurred under the so-called Saite dynasties, whose capital was Sais. The most important works of this period that have come down to us are the temples and other buildings at Philae. Sculpture reproduced with elegance and delicacy the types of an earlier period.

The arts and crafts of Egypt, from the time of the Old Kingdom down, were characterized by a style all her own. The country was famous for its enameled jewelry, furniture, ivory-work and arms. Its ceramics, of a blue lustre, was carried by Greek and Phoenician traders to every country bordering on the Mediterranean.

Bibliography.— For Nubia and Ethiopia, see HOSKINS: *Travels in Ethiopia. Meroe,* 1836.— ROSSELLINI: *Monumenti d'Egitto e della Nubia,* 1834. — J. BREASTED: *The Temples of Lower Nubia,* 1906. — G. MASPERO: *Restauration des temples immergés de la Nubie. Service des Antiquités,* 1907-1910. — E. WALLIS BUDGE: *The Egyptian Sudan,* 1907.— *Archaeological Survey of Nubia,* 1908.— For the temples of Meroe, see GARNSTANG: *University of Liverpool. Arch. Institute. Annual Meeting,* 1910. — For Philae, see: *Description de l'Egypte,* vol. V. — G. BÉNEDITE: *Le Temple de Philae,* 1895. — W. v. BISSING: *Denkmäler Aegyptischer Skulptur,* 1906-1911. — E. VERNIER: *La Bijouterie et la Joaillerie égyptiennes,* 1907. — FLINDERS PETRIE: *Egyptian decorative Art,* 1895. — H. WALLIS: *Egyptian Ceramic Art,* 1900. — M. ROSENBERG: *Aegyptische Einlage in Gold und Silber,* 1905.

PHOTO JAMES A. SINCLAIR & C.

Fig. 141. — Bas-relief showing the conquered foes of Egypt. The inner side of a chariot of the Pharaoh Tutenkhamun, found in his tomb.

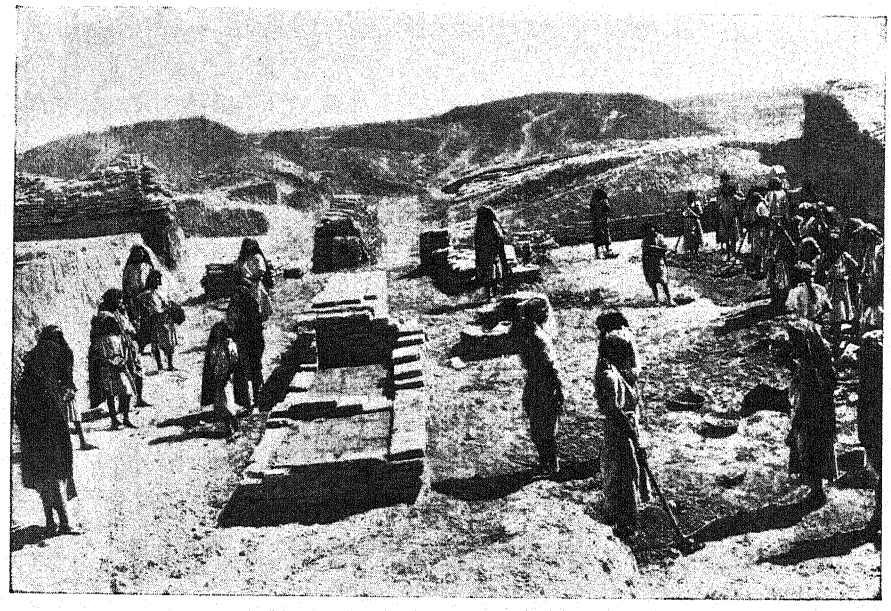


Fig. 142. — Excavations at Lagash. *(Sarzac-Heuzey.)*

CHAPTER VI

THE ORIGINS OF ASSYRIOLOGY. — BABYLONIAN ART. — BABYLONIAN ARCHITECTURE.

PREVIOUS to the year 1843 the only known sources for the history of the ancient empires of Western Asia were the oft repeated anathemas of the Hebrew prophets against Nineveh and Babylon. Nineveh, the capital of the Assyrian kings, "the Dwelling of the Lions", was already a vast heap of ruins when Xenophon with the "Ten Thousand" marched across Assyria. Babylon, half destroyed as it was, aroused the admiration of Herodotus who handed down to posterity many fanciful tales of its palaces, temples, gardens, walls and gates. Strabo found it almost deserted, but, unlike Nineveh, the memory of its location was never lost. The bricks of ancient Babylon with their cuneiform inscriptions were used as building

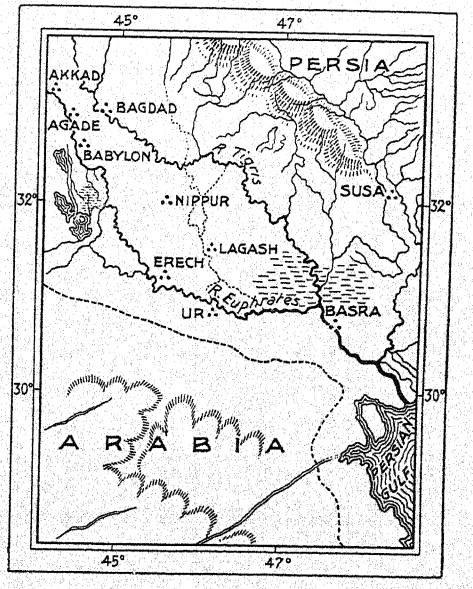


Fig. 143. — Map showing the ancient cities of Babylonia.

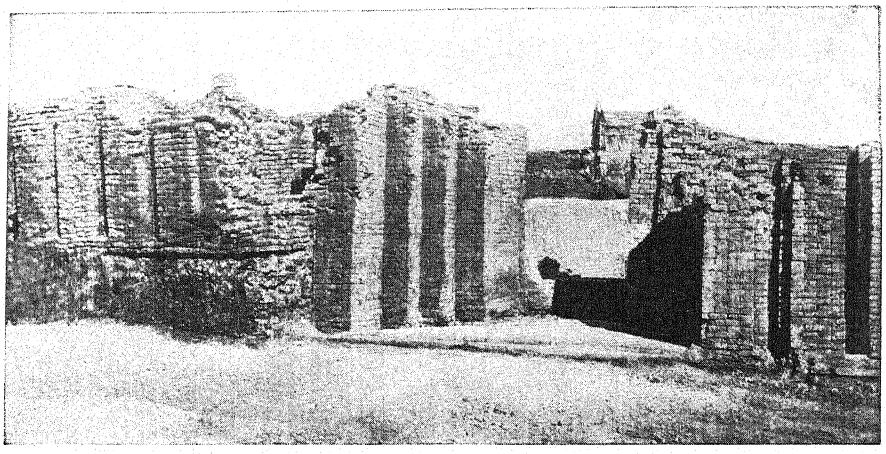


Fig. 144. — Palace gate at Lagash. *(Sarzec-Hauzey.)*

material by the inhabitants of Bagdad, and far out in the great desert crossed by the River Euphrates loomed up the great artificial mounds known to the Arabs as Babil and el-Kasr, suggesting by their names Babylon and her ancient palaces.

The history of Egypt shed some light on the Assyrian dynasties and the peoples of Babylonia who made treaties and carried on a diplomatic correspondence with the empire of the Pharaohs, but ninety years ago only a few small reliefs and other sculptures from Assyria had reached Europe. These had been brought by caravan across the deserts of Western Asia and had finally come into the hands of European dealers in antiques. Niebuhr was the first to appreciate how vast a field for research existed in the lands formerly occupied by these mighty empires. "Prepare the way", said he in 1829, "to an inexhaustible source of knowledge. New Champollions will interpret the languages of Assyria, and our sons may live to see the cuneiform writing deciphered".

Cuneiform writing was so named because its syllabic characters are composed of wedge-shaped lines. It existed long before the invention of the alphabet by the Phoenicians, and in its characters was written the diplomatic correspondence of the Orient. Not only was it mastered by the secretaries of the Pharaohs, but it was also used by the Persians, Hittites and even the Greeks to write their own languages. Its decipherment was infinitely more difficult

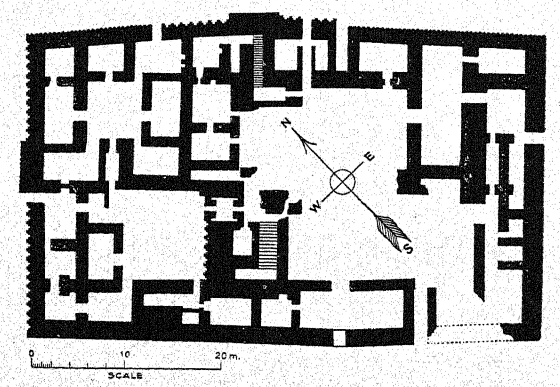


Fig. 145. — Plan of the palace at Lagash.

than that of the Egyptian hieroglyphics, which was facilitated by the discovery of the Rosetta Stone with its trilingual inscription. Many years of scientific controversy, conjectures and incessant study were to elapse before the phonetic value and the meaning of these characters could be established and the texts finally read. A brief sketch of the manner in which these difficulties were gradually overcome may be of interest to the reader. For a long time only the copies of a number of short inscriptions from the ruined walls of the palaces of Persia were accessible to the European scholar. These attracted the attention of a young teacher of Greek at Göttingen who soon noted the presence of two names which were frequently repeated. Both were short, and one appeared to be a continuation of the other, so Grotefend assumed them to be the names of Xerxes and his father, Darius. This gave a phonetic value for certain characters which proved to be of the utmost value. Years later, a young officer in the army of the East India Company named Rawlinson was stationed in Persia where he copied the great Behistun inscription. He conceived that a certain recurring series of names was a list of the provinces or satrapies subject to the Persian kings, and on this

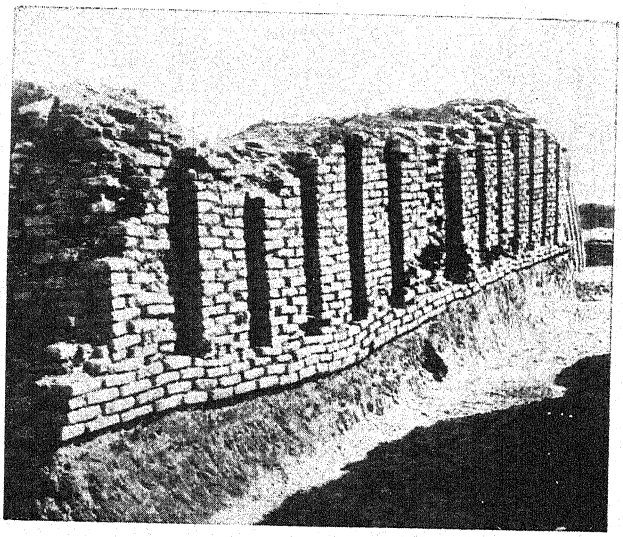


Fig. 146. — Palace at Lagash with its striated façade.

Fig. 147. — Vault at Lagash.

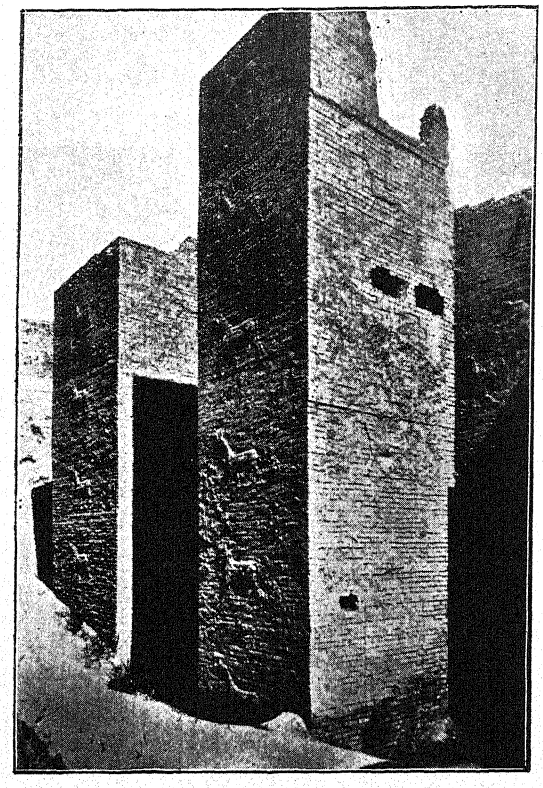


Fig. 148. — Towers of the Ishtar Gate of the palace quarter. Babylon. *(Koldewey.)*

basis he supplied a number of new syllabic values. This, combined with a knowledge of the old Persian language, was utilized in the decipherment of the Persian inscriptions. As the Behistun inscription was written in both Persian and Babylonian, it served as a key to the latter language.

In March, 1843, Botta, who was the French consular agent at Mosul, took a crew of laborers to the village of Khorsabad which he believed to be the site of Nineveh. It turned out to be the palace of Sargon, the Versailles of Nineveh, which the relentless conqueror constructed a few miles distant from his capital. Botta himself, however, never ceased to believe that he had discovered the ruins of Nineveh. His finds aroused tremendous enthusiasm in France, and the government not only supplied funds for continuing the work, but also sent out Flandrin to make plans and drawings of the monuments which were too large to be moved. The handsome book produced by Botta and Flandrin with its illustrations was a revelation to the scholars of Europe. Here was a new world entirely unrelated to that of ancient Greece and Rome, more striking even than Egypt which was becoming better known.

Anticipating the publication of Botta's discoveries, the British Museum commissioned A. H. Layard, an explorer already familiar with the country, to continue the work begun by the French. He published the results of his explorations in a work of unusual interest. Mingled with his accounts of his relations with Turkish officials and Arab chiefs and his desert journeys and camps we find the names of Sargon, Shalmaneser and Assur-bani-pal whom he had learned to conjure up from the crumbling ruins of their palaces. Layard's chief work was among the masses of brick, earth and debris of the mound of Kuyunjik, which was the site of the palaces of Nineveh.

Among the numerous inscriptions, Layard and Botta ventured to decipher a number of royal names. Although no dictionary or grammar of the Assyrian language had yet been compiled, the close relationship between this ancient

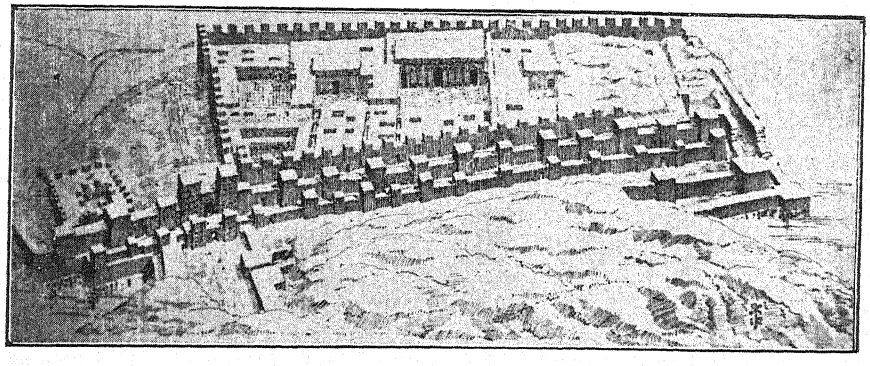


Fig. 149. — Restoration of the royal palace of Babylon with the Ishtar Gate and the Procession Street. *(Koldewey.)*

Semitic language and the Hebrew and Arabic was discovered, and, bit by bit, the meaning of each character was deciphered.

The English kept a party at Kuyunjik for a long time and Layard's work was continued by Hormuzd Rassam, a native Christian, although solely with the aim of collecting for the British Museum. The excavations were not carried on very scientifically and only sufficient work was done to permit the removal of the desired objects. The French, however, pursued their work in a more scientific spirit. They removed the miserable Arab hamlet standing upon the mound at Khorsabad and rebuilt it on the plain below, leaving the entire site of Sargon's great palace free for exploration. Botta died and was succeeded by the new consular agent, Victor Place, who was an able archaeologist. The latter, aided by the architect Thomas, also published a monumental work supplementing that of Botta and Flandrin.

Unfortunately a number of the reliefs of Khorsabad which Place removed in order to send them to the Louvre were lost in transit. Of the seven large rafts which were to transport them down the river to Bagdad, four were wrecked with their precious cargo. For this reason the Louvre possesses no such collection as that in the British Museum where the archaeological material must now be sought. Nevertheless, we are obliged to turn to the works of Botta and Place for reliable data regarding the plans, material and architectural features of these remarkable structures.

Truly, Niebuhr's prophecy was now realized. Hundreds of reliefs representing scenes typical of the life and art of the Assyrian people and covered with cuneiform inscriptions filled

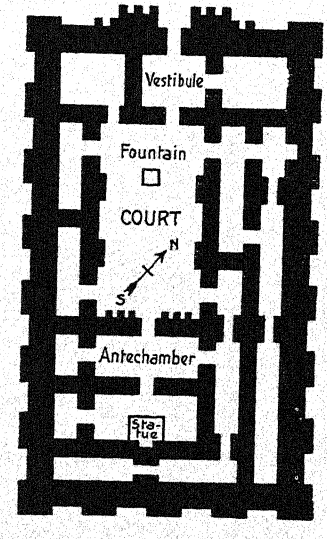


Fig. 150. — Plan of the palace of Ninmah. BABYLON.

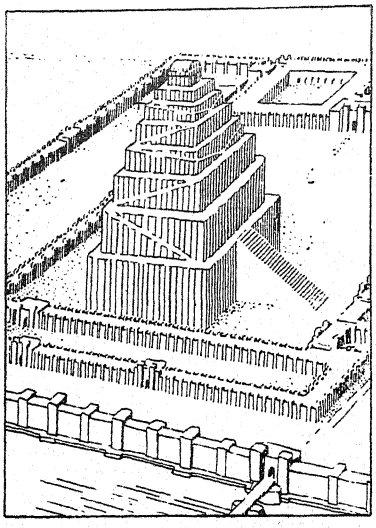


Fig. 151. — Restoration of the stage-tower of the temple of Bel, or Marduk, at Babylon.

the museums of Europe. Apparently insuperable obstacles had been overcome and the cuneiform writing was beginnngi to be understood; whole libraries of chronicles inscribed upon cylindrical tablets had been used to learn to read. There were even lists of nouns with their equivalents in another ancient language of Babylonia. This was non-Semitic in character and difficult for the Assyrian scribes to understand.

When the chronology of the country had become more or less accurately established, it was found that the Assyrian Empire was comparatively modern and had only begun its career of conquest about the year 1300 B.C., when Egyptian decadence was already in sight. Assyrian texts tell us of Babylon, the religious centre of the Orient, and of its antiquity. We read of Susa and the kingdom of Elam, of Erech (Uruk), of Akkad and the Akkadian kingdom of the oldest Semitic population of Babylonia (fig. 143). These cities all had their day before Nineveh ruled the land, and even then a confederation of Babylonian cities worried the Assyrian kings with their constant revolts. Orientalists were filled with an eager desire to know more of ancient Babylonia. Surely, here was the cradle of the civilization and art of Asia. Leon Heuzey tells us how Longperier who was almost on his

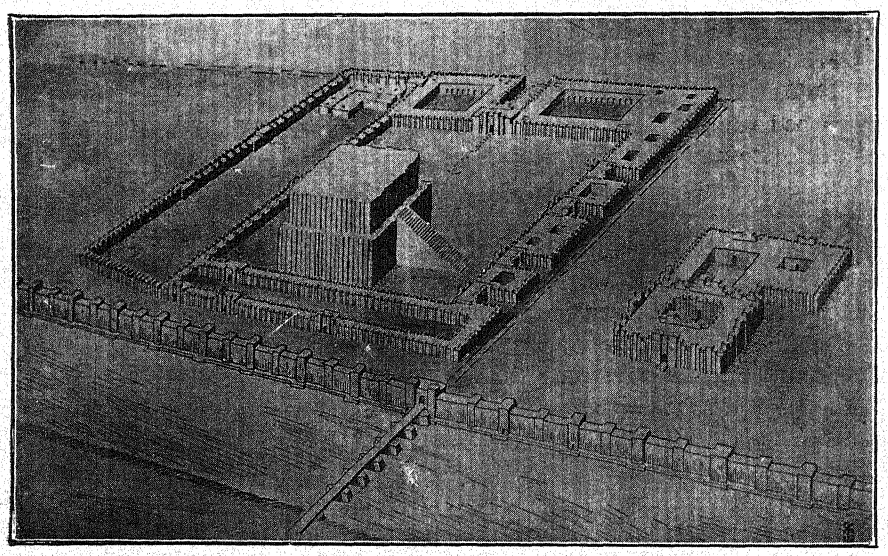


Fig. 152. — Restoration of the temple of Bel, or Marduk, at Babylon. *(Koldewey.)*

Fig. 153. — Tablet of Ur-Nina and his sons.

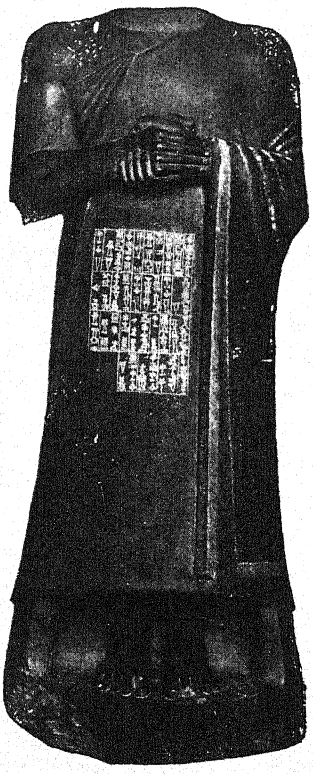


Fig. 154. — Statue of Gudea.
(Sarzec-Heuzey.)

death-bed went to view the first consignment of Babylonian objects of art that arrived at the Louvre, for in Babylonia, as in Assyria, the French were again the pioneers.

The story of these first discoveries reads like a romance. A new French consular agent, Ernest de Sarzec, had been sent to Basra near the Persian Gulf. He explored the site of an ancient city at Tello which was found to be the ancient Lagash, or Sirpurla. In spite of the malarial climate of the region, de Sarzec spent a number of seasons in arduous field work between the years 1877 and 1881, and returned to France with a splendid collection of statues and reliefs. This was acquired by the Louvre which indemnified him for the expenses incurred in his work. Leon Heuzey then collaborated with him in compiling an elaborate report of his discoveries which was published under the auspices of the French Government. His work confirmed what had already been surmised, that Assyria had done little more than imitate her neighbors to the south. Her art, like her writing and religion, had been derived from Babylonian sources.

By the aid of a semiindependent Arab chief de Sarzec was able to explore the ruins of Lagash with comparatively little interruption. It was, of course, unfortunate that he was not accompanied by a trained archaelogist to study the stratification of the ruins which he uncovered. Nevertheless, the tablets and inscriptions which de Sarzec brought from Lagash have made it possible to piece together the history of a Babylonian city from a period prior to 3758 B.C., a date established by contemporary inscriptions found in Babylonia.

As elsewhere in Babylonia, and later on in Assyria, the principal building at Lagash was the royal palace, or fortified residence of the ruler. In Egypt the Pharaohs bent all their energies toward the construction of their tombs, but a

Fig. 155. — Statue of Gudea called the Architect. *(Sarzec-Heuzey.)*

Babylonian monarch impressed his subjects and neighbors with his importance by building a new palace upon the ruins of that of his predecessor. This Oriental custom of not clearing away the debris upon a site, but levelling it up and building on top of the remains of the previous structure greatly complicates the work of exploration, for layer after layer are found superimposed on one another. Also the builders of Babylonia did not hesitate to give themselves credit for the construction of a building which they had only restored, for they were accustomed to alter the inscription which commemorated its erection. The utmost caution, therefore, is required in ascribing to a particular period a monument which shows signs of restoration.

The foundations of the royal palace of Lagash, explored by de Sarzec, contain layers which date from the most remote antiqutiy. The building itself was completely rebuilt by a jealous achitect-prince named Gudea who is supposed to have lived about the middle of the third millenium B.C. According to the inscriptions, this noted monarch of the little state of Lagash near the mouth of the Euphrates was of a peaceful disposition. Unlike his warlike predecessors, only once did he boast of a military triumph. He was a devout prince and rebuilt or embellished the temple of his patron deity, Ningirsu, the tribunal of the "Forty" and a number of other public buildings identified by de Sarzec in the neighborhood of the royal palace (fig. 142). Only the latter, however, was laid bare by the extensive excavations of de Sarzec. The palace was set upon a brick platform about forty feet high like the edifices of Nineveh which were constructed along the traditional lines of those of southern Babylonia, as we shall see later. Not only did this give the structure an imposing and monumental appearance, but it was a necessary precaution, for this low country was constantly exposed to innundations. De Sarzec found this building to be divided into three groups of apartments which correspond to the divisions of the Arab palaces of the present day. These were the harem, reserved for the women and children, the selamlik for the servants and for general use as well and the reception halls on the other side of the great court. This last was dominated by the temple which was in the form of a stage-tower. The entire edifice is of brick and its plan is not exactly rectangular. It recalls rather the outline of the barrel-shaped tablets of cuneiform inscrpitions with their flattened sides (figs. 144, 145 and 146).

This dilation of the ground-plan suggests a mystical significance like that of certain combinations of numbers and measures which were already employed in the palace of Gudea and were later to exercise an important influence upon the architecture of Babylonia. The walls were not smooth, but were ornamented with the deep parallel vertical grooves which we shall also find in the buildings of Assyria. Indeed, the Arabs preserved this architectural feature down to the Middle Ages (figs. 144, 145 and 146). Another common element of Oriental construction is the vault which is a natural consequence of the use of brick (fig. 147).

Fig. 156. — Shaved head from Lagash.

The Egyptians were acquainted with both the arch and the vault which they occasionally employed, but they were not indispensable in that country owing to the abundant supply of great slabs of stone which were not only used as lintels, but also served to roof the great hypostyle halls of their temples. In Babylonia there was no stone, nor even wooden beams, so the inhabitants of the marshy delta of the Euphrates invented the vault to cover the rooms of their houses and the halls of their palaces. It has been surmised that this invention was a natural outgrowth of the arched form of the reed huts which are still in use among the natives of the country. Certainly in the more important buildings and even in the drains which pierced the great brick platforms vaults of wedge-shaped bricks were employed. A peculiar feature of Babylonian architecture was the use of bitumen for mortar; deposits of this material are abundant in Babylonia. We find in the Bible a description of early methods of construction in the lower valley of the Euphrates: "Go to, let us make brick and burn them thoroughly", said the builders of the Tower of Babel, and the writer adds: "And they had brick for stone and slime had they for mortar." In his exploration of the royal palace of Lagash de Sarzec came upon courses of brick laid in a thick bed of bitumen. Sometimes the bricks were laid in alternating courses, one in bitumen and the next in a simple clay mortar.

Fig. 157.—So-called "head with the turban".

Later, the expedition directed by Professor Hilprecht of the University of Pennsylvania, while exploring the ruins of Nippur, came upon a Babylonian temple of extreme antiquity, and the German Orient Society discovered near Babylon the archaic temple of Borsippa which was similarly arranged to that of Nippur and consisted of a court surrounded by *cellae* adjacent to a stage-tower.

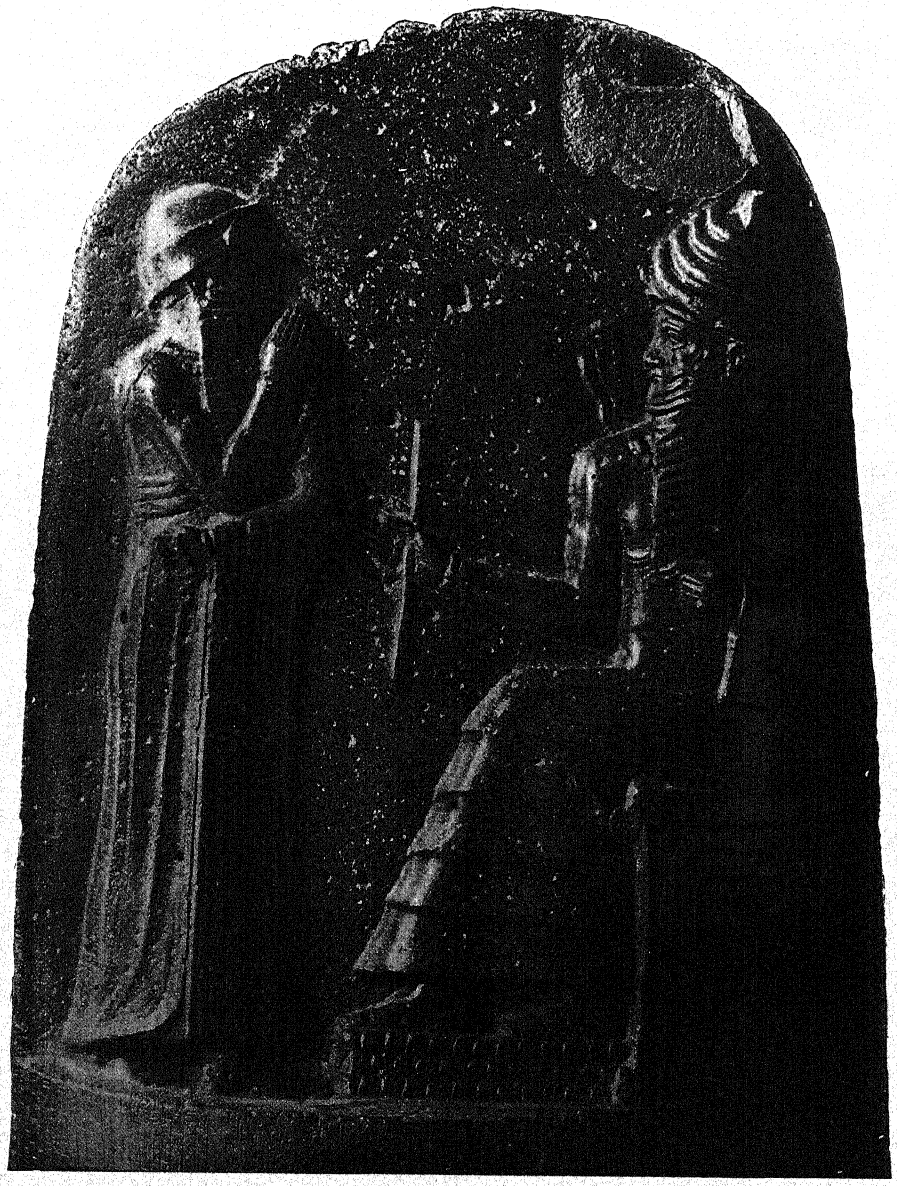
Fig. 158.—Female figure from Lagash.

But the most important explorations of all were those of the Germans in the mounds of Babylon itself. When the first edition of this book was printed, the results of the work of the Germans had not yet been published. Since that time Koldewey's book has given us some idea of the enormous scale upon which the excavation was carried on and of the details of the discoveries. From 1899 until the war broke out in 1914 the Germans maintained an army of more than two hundred and fifty laborers in the field. Although they opened trenches in various directions to determine the extent and topography of the city, their efforts were concentrated chiefly upon two particular mounds. These were el-Kasr, the remains of the royal palace, and E-sagila, the famous temple of Marduk, the patron deity of Babylon.

The structures of the palace quarter consist of three units, the Ishtar Gate, the Procession Street and the palace itself. The Gate of Ishtar, the Babylonian Venus, was flanked on either side by two square towers and was the entrance to the so-called Procession Street (fig. 148). These towers are decorated with glazed tiles representing bulls, lions and the *sirrush*, a dragon-like hybrid creature which combines the features of the serpent and hawk and was the companion of Bel, or Marduk (fig. 164).

On either side of the procession street were square towers ornamented with glazed tiles representing lions. This led to the temple of Bel called E-sagila. It was well defended by its lofty walls covered with reliefs and was known as "Aibur-shabu", "may the enemy not wax strong". It was restored by Nebuchadnezzar whose seal appears on the bricks and who dedicated it in the following inscription: "I, Nebuchadnezzar, King of Babylon, son of Nebopolassar: The streets of Babylon, the procession street of Nabu and Marduk my Gods, which my father paved with asphalt, did I cover with bitumen and burned bricks. Oh Nabu and Marduk, my Gods: When you joyously pass through these streets, grant me your blessing, health and a long life. May I also obtain immortality." With such inscriptions do the ruins speak. The procession street recalls scenes from the Book of Daniel. We see the great king in his palace accompanied by his priests and magicians and a picturesque throng of courtiers, among them Daniel and

Fig. 159.—Shamash in his temple at Sippar.



Upper portion of the stela containing the Code of Khammurabi. (2100 B.C.) *(Louvre.)*

his youthful companions in captivity.

The royal palace has not yet been completely cleared of its debris. The middle portion of the west side still lies buried, but, in the excavated portion are three courts. Around two of these are the small chambers of the guard and the rooms of the palace officials. On the third court is the great throne-room decorated with tiles and behind it the bedrooms and private apartments of the king (fig. 149).

Fig. 160. — Stela of Naram-Sin. *(Louvre.)*

The other monumental structure is the temple of Marduk, or Bel, in its spacious enclosure. Its arrangement may be studied in the report of the German explorations which were not completed when the work stopped in 1914. The temple-complex of E-sagila, as it is called, is also divided into a number of courts. Adjoining two of these are numerous small cells intended for the shelter of pilgrims. In the great court two stories of the famous stage-tower still remain standing. Upon its summit was the shrine containing the statue of Marduk, cast from solid gold. Behind the great court were two lesser ones surrounded by the apartments of the priests (fig. 152).

Not only have we written testimony that the image of the god was worshipped in a room which also contained the altar of the cult, but there is also a relief representing Shamash, the Sun-God, in his shrine at Sippar (fig. 159).

The monumental character of E-sagila would give us an exaggerated idea of the early Babylonian temples, but we also find smaller temples in Babylon constructed on a plan that was evidently the established canon for religious edifices of lesser importance. In the façade is a door flanked by two towers and opening into a vestibule which leads into a court. Across the court is the entrance to the sanctuary, on either side of which are parallel vertical groves. The *cella* containing the image of the god has an antechamber for the worshippers and a hall intended for votive offerings.

The sculptures and inscriptions found at Erech and Lagash and the results of researches at Babylon and Npipur have brought out the startling fact that

Fig. 161.—Babylonian stela of Marduk-Nadin-Akhi.

there was a non-Semitic population living in southern Babylonia at a very early period. Their language resembled the Mongol more than it did the Hebrew. Scientists are not yet fully agreed concerning their origin, but we know that they were finally absorbed by the Semitic invaders who founded an Empire at Babylon. These Sumerians, as they are called, intermingled more and more with the ancient Semitic population until their language completely disappeared, surviving only in old liturgies handed down by the priesthood.

There has been much interest in knowing more about these early Babylonians who abandoned the nomad life of the desert and their prehistoric tools of stone to discover the use of metals, invent writing and establish a more enlightened system of religion, law and administration. Before Babylon became the capital, the independent cities of Sumer (Sumerian) and Akkad (Semitic) grew up under their local rulers called *patesis* and were continually warring upon one another, according to the early inscriptions. Such were the political conditions along the lower course of the Euphrates during the fourth millenium B.C. This was about the time when Egypt was beginning to organize its nomes or provinces into an important state with its capital near the mouth of the Nile, so in both cases we find a civilization growing up on the alluvial soil of an important river. These *patesis* combined the vigor of a ruler with a a certain contemplative and spiritual tranquility that was characteristic of this ancient people. Here were the patriarchs whom we find idealized in the Old Testament, priest-kings like Melchizadek who blessed Abraham and received his tithes. In the small votive tablets we see the ruler among his many sons, the dignity of his office indicated by his taller stature (fig. 153). Gudea, the builder-king of Lagash is portrayed in a number of large massive statues, sometimes standing with his hands folded in a priestly attitude (fig. 154), and again, seated with a broad tablet upon his knees on which he drafts the plans for his temples. On the tablet lies the rule graduated to scale and the stylus of the architect. Deep feeling is portrayed in the figure of this prince who consecrates the temple which he has erected for the worship of Ningirsu, the patron deity of his people (fig. 155). Gudea is simply dressed in a broad cloak without sleeves which is folded over his left shoulder leaving the right arm free. It was probably his only garment, the white mantle which the Babylonians were still wearing in the time of Herodotus. In these statues of Gudea we see the same combination of se-

renity and vigor which characterized the early Romans many centuries later. These figures have no heads, but two detached heads were found which give us a good idea of the faces and head-dresses of these ancient dwellers in the Euphrates valley. Their heads were round and completely shaved, as were their faces. Only the heavy arched eyebrows remain (fig. 156). Another, called the head with the turban, shows us how Gudea's subjects protected their heads from the burning rays of the sun (fig. 157). From what we know of later Babylonian history, we conclude that the women were kept secluded in the harem and did not play the part in public life that they did in Egypt. Yet we have interesting sculptures of feminine types portraying the wives and daughters of these men (figure 158). Many of the Babylonian sculptures were carved from the hardest stone, like the diorite and dolomite which Gudea and the other *patesis* boast of having imported from distant lands. The alluvial plain did not furnish stone or boulders of any description, and the Babylonians were obliged to construct their buildings of the native clay of the country.

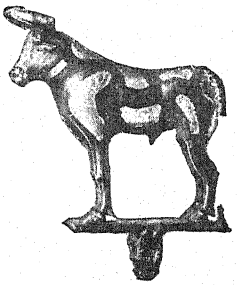


Fig. 162. — Amulet from Lagash in the form of a bull. *(Louvre.)*

Under these petty kings, contemporary with the patriarchs of the Old Testament, originated all the artistic types of Babylonia. To this people must be ascribed the buildings so characteristic of that country as well as its moral standards and its laws, all of which dated from the early days when the cities of the lower Euphrates still enjoyed their patriarchal independence. Lagash, the city of Gudea, was only one of these early art centres; others were Akkad, Umma, Erech, Ur, the city of Abraham, and Susa over in Elam. Weakened by their continual struggles with one another, they were finally subdued by Sargon of Akkad, the first of the great Semitic conquerors, and later by the kings of Babylon.

Owing to the rather extraordinary archaeological tastes of a king of Susa named Sutruk, two remarkable monuments have been preserved which he carried home from Babylon as trophies. These date from a very early period of that city. One is a magnificent porphyry column on which are inscribed all the laws dictated to King Khammurabi by his patron deity, Shamash. It is a civil and criminal code not unlike that of Moses. Above the inscription is a splendid relief representing the king who stands, stylus in hand, before the seated figure of the god from whom he receives his instructions. Upon the head of the god is a crown with horns, and he sits in a range of mountains. The Babylonian code of Khammurabi was discovered at Susa in January 1902 and is without doubt the most important archaeological

Fig. 163. — Lion with human head.

find in the Oriental field. (Plate XIII.) It consists of more than two hundred statutes regulating every phase of civil life among the people of the early Babylonian Empire.

The other monument is the handsome stela of Naram-Sin, one of the successors of Sargon of Akkad. Naram-Sin probably reigned about the twenty-fifth century B.C. Here we see him upon a mountain slope at the top of which is an extraordinary symbol or idol of some sort. At his feet are his conquered enemies, some dead and others in an attitude of supplication. Behind him his soldiers ascend the mountain in military formation with their eyes fixed upon their leader who is much taller than any of the other figures. The relief is carved from a limestone slab, and although it is somewhat defaced by age, it is spirited and impressive in the highest degree.

Babylonian art never lost its own peculiar character down to the time of the Assyrian supremacy. In Plate XIV we see the stela of Mardukpallidin who reigned in the Ninth Century B.C. From its style it might well have been carved in the time of Khammurabi. In the stela reproduced in figure 161 we see another of the later Babylonian kings who were subject to Assyria, but always ready to rebel against the tyrannical oppressor.

Not only do the Babylonian sculptors display a thorough knowledge of the human body, but their representations of animals are admirably faithful. We are astounded to see among the earlier sculptures of southern Babylonia a sphinx, or lion with a human head, already wearing the mitre and double horns characteristic of the winged lions ornamenting the gates of the Assyrian palaces (fig. 163). We shall constantly encounter in Oriental art this sculptural creation

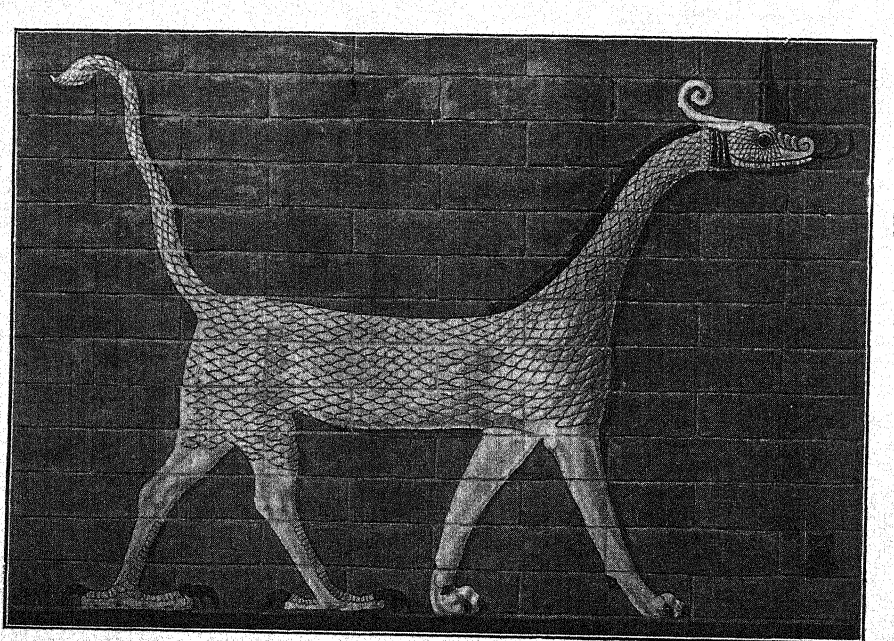
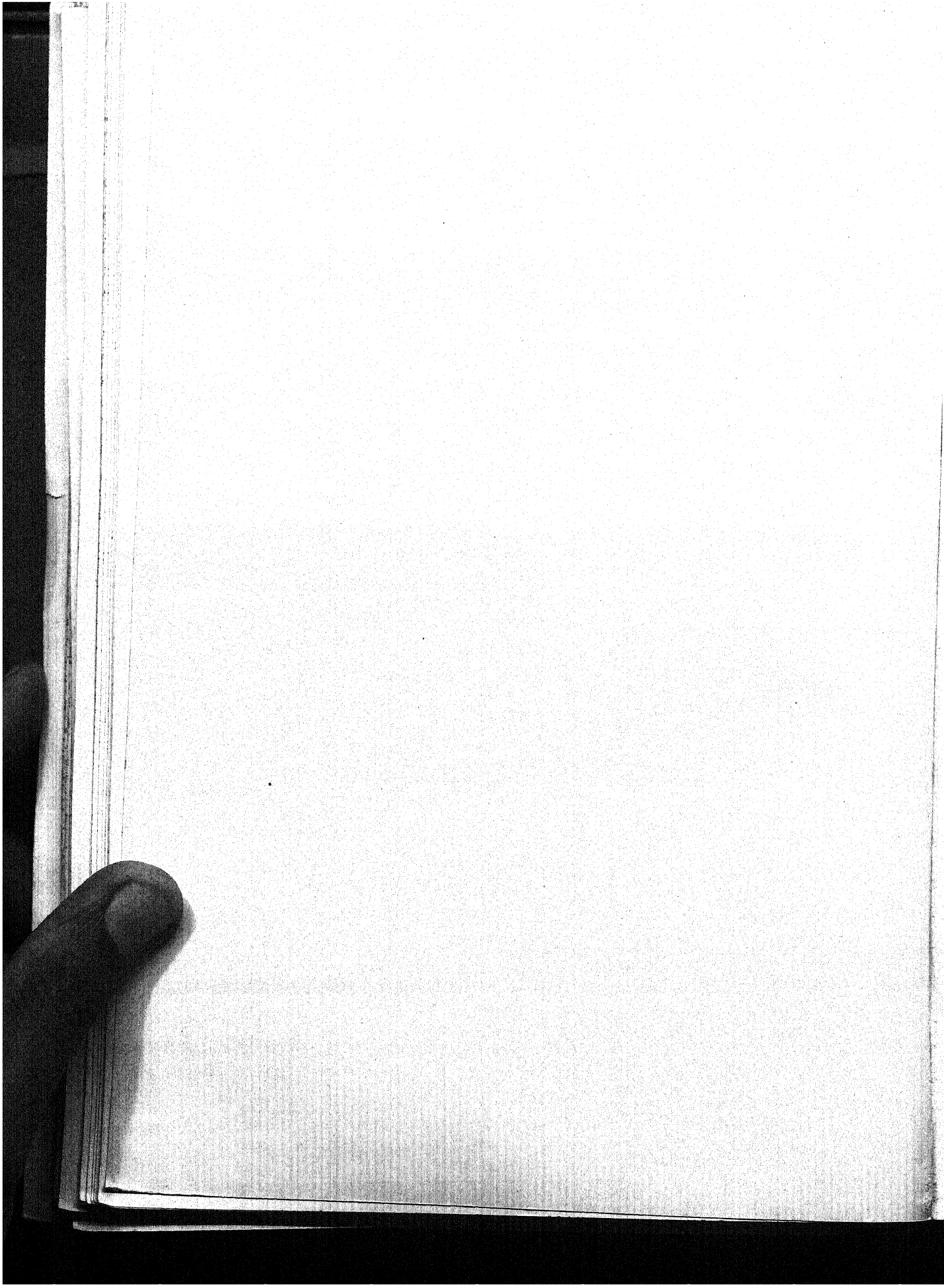


Fig. 164. — *Sirrush*, or dragon. Glazed tile on the Ishtar Gate. BABYLON.

Stela of Mardukpallidin. *(Berlin Museum.)*



which associates the force and vigor of the animal with the mentality of man.

We find the bull used as an amulet, but with a natural head (fig. 162); bulls and lions with human heads are frequently seen on the inscribed seals and cylindrical tablets of Babylonia. Nowhere do we find more clearly described the mythological details of an ancient Oriental religion than on these cylindrical seals which, when pressed upon wax or soft clay, left the impression of the gods and monsters of the Babylonian Pantheon (fig. 166). Bulls with human heads are found among demi-gods, mitred heroes, lions and eagles, and the space between is crammed full of cuneiform inscriptions.

Fig. 165. — Repoussé silver vase from Lagash. *(Louvre.)*

Besides their brick structures and marvellous sculptures, which are so typical, the Babylonians originated most of the themes employed in the arts and crafts of the Orient. The surrounding peoples of Asia did little more than imitate their technique in metal-work, whether cast or repoussé, gem-cutting, furniture-making and weaving. The magnificent silver vase of Entemena (2850 B.C.), found by de Sarzec at Lagash (fig. 165), with its familiar Oriental theme of eagle and lions still employed in the Byzantine textiles of the Middle Ages, had its origin in the petty cities of the Euphrates delta almost three thousand years before our era. Another important Oriental industry that was well represented in ancient Babylonia was the manufacture of glazed tiles. We have already noted that the excavations by the German Orient Society have uncovered in the so-called Procession Street of Babylon many fine examples of these tiles representing the conventionalized flowers and the animals so typical of Oriental ceramics from that time on. Indeed, in Erech, a city as ancient as Lagash, Oppert discovered a temple-base decorated with glazed tiles. Just as these lines are going to press we note that the results of the excavations at Ur, the city of Abraham, are being published. The work has been carried on by the British Museum and the University of Pennsylvania, and the massive walls of a stage-

tower and of other monumental structures have been laid bare. Interesting sculptures have been discovered among the ruins as well. These excavations, which are still in progress, promise revelations as important as were those of Tello in the last century.

Summary. — Babylonia is an alluvial plain bordering on the lower Euphrates River. In the early Babylonian cities we find the principal features characteristic of the civilizations of Asia. Buildings were of brick, set upon a raised platform and were ornamented with glazed tiles. The earliest temples were step-pyramids, or stage-towers, consisting of from three to seven stages. Sculpture was the principal art of Babylonia, where the statues were carved from hard stone like diorite and dolomite which was imported from other parts. We find human figures, both seated and standing, with folded hands in an attitude of mystic exaltation. Babylonian artists at a very early period originated the type of the bull with a human head which was handed down to later Oriental art and even to that of the Occident. In the metal work, gem-cutting and other arts and crafts of ancient Babylonia we find numerous themes which survived for the most part in the art of the other Asiatic civilizations.

Elaborate tombs were unknown in Babylonia and Assyria, so far as we can ascertain. There are great cemeteries in Babylonia in which the remains were interred in great clay vessels. The arts and crafts of Babylonia reached their highest development during the first Babylonian Empire. The ruins of Babylon which survive are of buildings erected subsequent to the destruction of Nineveh by Nebuchadnezzar. Here the monumental architectural types are the stage-towers and palaces which we found in the old cities of southern Babylonia. Babylon was the capital in which were concentrated the efforts formerly scattered among the cities of the South prior to the formation of the Empire.

Bibliography. — On the history of the discoveries, A. H. SAYCE: *Archaeology of the Cuneiform Inscriptions*. 1907. — H. W. HILPRECHT: *Explorations in Bible Lands*, 1906. — L. W. KING: *History of Sumer and Akkad*, 1910. — R. W. ROGERS: *History of Babylonia and Assiria*, 1915. — H. WINCKLER: *The History of Babylonia and Assyria*, 1907. — G. MASPERO: *Dawn of civilization*, 1894.

On Babylonia, J. OPPERT: *Expédition Scientifique en Mésopotamie*, 1859-1863. — On Lagash, SARZEC-HEUZEY: *Découvertes en Chaldée*, 1884-1912, followed by GASTON CROS, LEON HEUZEY and FRANÇOIS THUREAU-DANGIN, *Nouvelles Fouilles de Tello*, 1910. On the excavations in Babylon, H. W. HILPRECHT: *Nippur. Babylonian Expedition of the University of Pennsylvania*, 1904. — R. KOLDEWEY: *Die Tempel von Babylon und Borsippa*, 1911. On the Code of Khammurabi, *Délégation en Perse. Mémoires*, IV, 1902. — R. F. HARPER: *The Code of Hammurabi*, 1904. — N. DAVIES: *The Codes of Hamurabi and Moses*, 1905. — H. WINCKLER: *Die Gesetze Hammurabis*, 1904. — M. JASTROW: *Aspects of Religious Belief and Practice in Babylonia and Assyria*, 1910, and *The Civilization of Babylonia and Assyria*, 1915. — R. KOLDEWEY: *Das Wieder-Erstehende Babylon*, 1913; English translation by AGNES ST. JOHNS, under the title: *The Excavations at Babylon*, 1914.

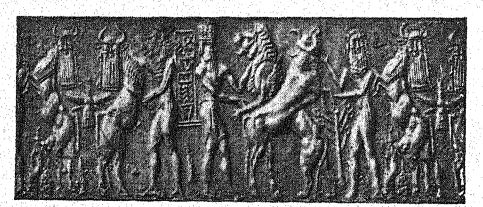


Fig. 166. — Extension of a Babylonian cylinder.

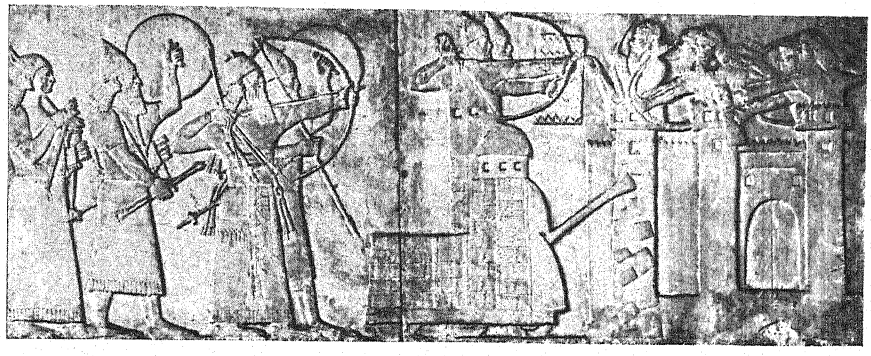


Fig. 167. — Assyrian warriors with their engines of war besieging a city. *(British Museum.)*

CHAPTER VII

THE ORIGIN OF ASSYRIA. — THE PALACES OF NINEVEH. SCULPTURE AND THE INDUSTRIAL ARTS.

FOUNDED upon the high plain overlooking the upper waters of the Tigris in the Fifteenth Century B.C., the city-kingdom of Assur fell heir to the art and culture of the Babylonians. We find in the Old Testament an account of this succession of empires in Western Asia: "And Cush begat Nimrod: he began to be a mighty one in the earth. And the beginning of his kingdom was Babel and Erech, and Accad and Kalneh in the land of Shinar. Out of that land he went forth into Assyria and builded Nineveh." This has been confirmed by archaelogical discoveries of our own times. First came the allied cities of Babylonia with Babylon at their head, then the kingdom of Assyria with its three capitals, Assur, Calah and Nineveh, one after the other. Just as the civilization of the Nile valley began near the mouth of the river and progressed up-stream, so did the culture of Western Asia originate in the delta and gradually extend up the valleys of the Two Rivers. We have already seen how the early Babylonian cities were located along the lower Euphrates; here were created the architectural types and artistic styles of the nations of Western Asia. Assyria was situated upon the table-land crossed

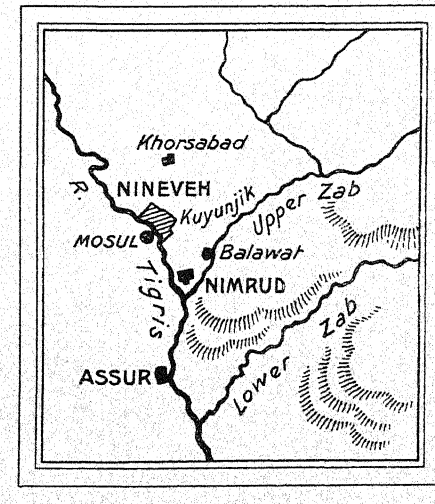


Fig. 168. — The triangle of Assyria.

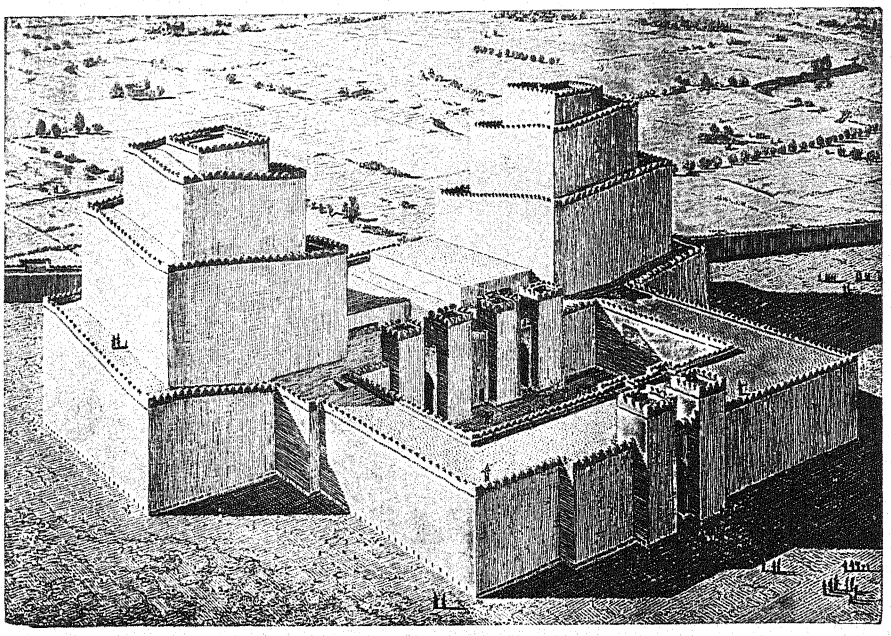


Fig. 169. — Restoration of the double temple at Assur, the religious centre of Assyria.
(Excavated in 1908 by the German Orient Society.)

by the Tigris and Euphrates rivers and lying against the mountains of Persia and Armenia to the east and north. Its soil was dry and clayey, and the country itself presented a variety of topographical conditions; rich lowlands alternated with high tablelands inaccessible to the water from the irrigation canals. Agriculture never sufficed for its support; the source of its wealth was always the spoils of war.

The cities along the left bank of the Tigris were defended on the east by another river called the Zab, or Upper Zab, in such a manner that Assyria is set within a natural strategic triangle which points toward Babylon to the south (fig. 168). Large and powerful as some of these Assyrian cities became, none of them ever rivaled Babylon either in splendour or size.

Assur, the holy city of ancient Assyria, has been explored in recent years by the German Orient Society *(Deutsche Orientgesellschaft),* which has published an excellent report of its discoveries. The excavation of the temple at Assur has taught us much regarding the early history of Assyria when its rulers were still subject to Babylon and little more than the viceroys of the mighty lords of the south. Many of the earlier Babylonian documents refer to Assyria, or Assur, as merely a province. It is in the Code of Khammurabi, described in the previous chapter, that we find the most ancient mention of Nineveh. In the course of time, however, these Assyrian vassals achieved their independence and finally conquered Babylon, a most unwilling subject to their yoke.

Later on, when all Western Asia lay subject to their command, the kings of Assyria built other capitals further to the north, but they never ceased to place

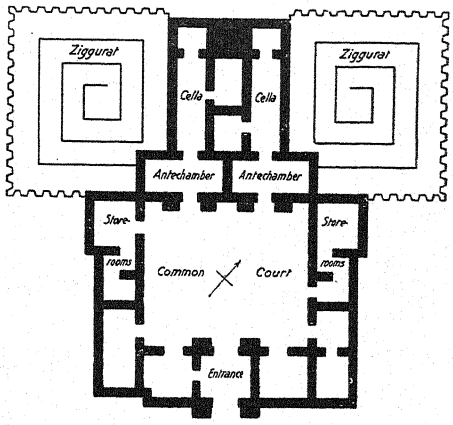


Fig. 170. — Plan of the temple of Assur.

themselves under the protection of the god of Assur when they set out upon a military expedition. In the Assyrian texts Assur is called the "Terrestial Mount", a symbolic term not unlike the "Mount Zion" of the Christians. Lying close to the Babylonian frontier, the rectangular enclosure of Assur is still outlined by the ridges and mounds which are all that remains of the walls of the ancient city. The temple explored by the German Orient Society was a double one, as may be seen from its plan; surely Anu and Adad were worshipped together in this national sanctuary. Two independent *cellae* front upon a common court, and adjacent to each is a *ziggurat,* or stage-tower, similar to those of Babylonia (figs. 169 and 170). We immediately note the traditional features of the religious edifices of Babylonia; as at Tello, or Lagash, the wall becomes thicker on either side of the doorway; the chambers connected with the "holy of holies" are set within massive brick walls and are lighted only from the doorways which open upon the court. The double ziggurat rising on either side has but three stories like the more ancient stage-towers of Babylonia. On its façades are the deep vertical grooves seen at Tello and Warka. In fact, the entire arrangement of the ancient temple of Assur is very similar to those recently explored by Hilprecht at Nippur and by Koldewey at Babylon. As might be expected, the temple at Assur was simply a Babylonian temple and rather typical of those of the smaller cities of the latter country. The bricks were not burned, but merely sun-dried, and were stamped in the same manner as were the Babylonian bricks. These sun-dried bricks were characteristic of the buildings of Assyria and this is the principal reason why they have crumbled away so completely.

The royal palaces of Nineveh and Calah had already been explored when the excavation of the temple at Assur was undertaken. The monumental structures that were once the residences of the kings of Assyria are now merely mounds of clay ascribed by Arab superstition to certain legendary desert kings. The Assyrians transferred their capital from Assur to Calah, a city mentioned in the Bible and known to the Arabs today by the name of Nimrud. Little is known of the topography of this city owing to the hasty manner in which it was explored by the expedition sent out by the British Museum.

Finally the capital was moved to Nineveh further to the north and not far from Mosul where the Turkish Vali, or governor, resided up to the time of the war. The palaces of the Assyrian kings lay across the river on the spot now occupied by the mounds of Khorsabad and Kuyunjik. The former were the first to be explored and were found to be the remains of the residence of the founder of the powerful dynasty that reigned at Nineveh. We know that Sargon took a

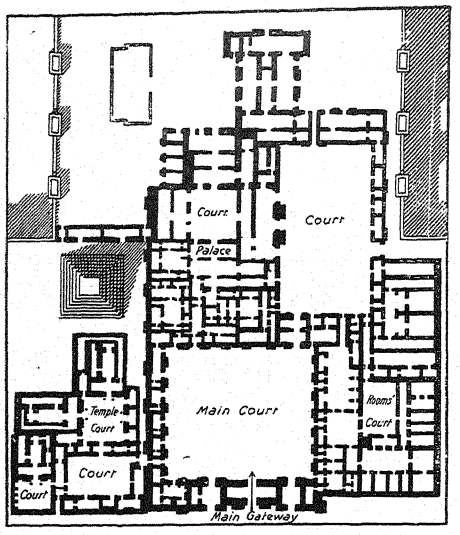


Fig. 171.—Plan of the palace at Khorsabad. *(Place.)*

personal part in the assassination of his predecessor and former friend, Shalmanesar IV. He appears to have had misgivings at making Calah, the old capital, his seat of government, and for this reason, no doubt, he went to Nineveh which was already in existence. Here a few inscriptions dating from the period of his reign have been found. About eighteen miles north of Mosul, on the site now known as Khorsabad, he constructed a palace and a city known as Dur-Sharrukin, or "Fort Sargon" as we would say now. The handsome reliefs in the Louvre bear witness to the wealth of decoration he lavished on this palace, but after his death both city and palace seem to have been abandoned, for we find no memorials of his successors. Dur-Sharrukin was probably one of those shortlived capitals, the fancy of a single king, which hardly outlived its creator, like the city of Pienza in Italy founded by Pope Pius II and today almost deserted. The royal palace at Khorsabad was located in the centre of one side of the great rectangular platform on which the city was built as well as the palace. Here again we find in Assyria a traditional feature of Babylonian architecture, although it was not required by the character of the country. There was no flat plain subject to innundations, as in the delta of the Euphrates, and this great substructure can only be explained by a deeply rooted reverence for custom and tradition. In one respect, however, it differs considerably from the brick platforms of Babylonia; in the latter country we do not find one great base for each building. The bricks of this enormous substructure have solidified into one compact mass of clay. To preserve the perpendicular faces of its outer walls, it was necessary to construct a casing of burned bricks or stone; otherwise the platform would crumble away after the first few rainy seasons. We know little of the city which rested upon this base, for only the principal building has been carefully explored; this was the royal palace which contained the apartments of the king.

Our knowledge of the interior arrangement of the royal palaces of Assyria is largely derived from the structure at Khorsabad, as this is the only one that has as yet been thoroughly explored. The building breaks the outer line of the main platform in such a manner that the rear portion of the palace juts out upon the surrounding plain (figs. 171 and 172). It consists of a great architectural complex comprising three distinct groups. Beyond the gateway with its winged lions and projecting walls, lies the great main court upon which the various lesser structures front. Opposite the entrance is the collection of courts

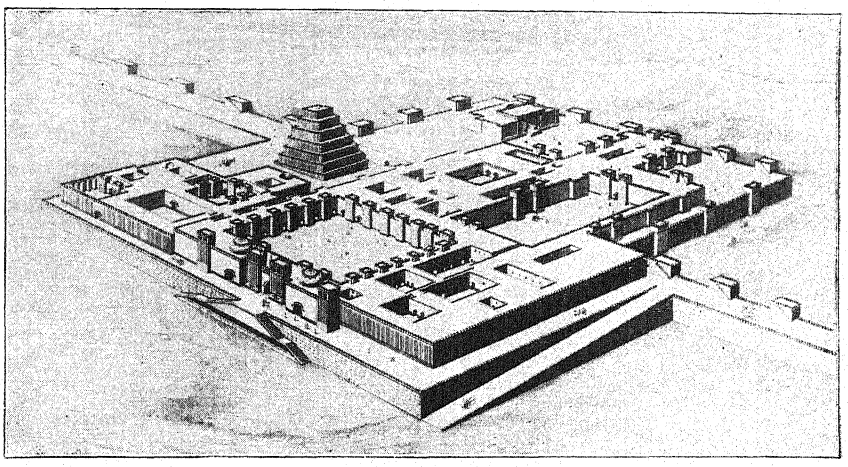


Fig. 172. — Restoration of the palace at Khorsabad. *(Place.)*

and apartments which constituted the *selamlik,* or palace proper. When Botta explored these runis he called it the *serail,* or seraglio. In it were found reception halls ornamented with scultptures, the women's apartments and the like. It was the most important part of the palace with a throne-room opening upon the court, and its arrangement is very similar to that of the palace at Babylon described in the preceding chapter. On the east side of the main court were the store-rooms, stables, granaries and slaves quarters which Botta groups together under the name of *dépendences.*

Finally, in the south-west quarter were found a large number of rooms and courts which Place and Botta believed to be the harem, or the apartments of the queens. As this portion of the palace consisted of three independent groups, it was believed that Sargon had three wives of royal rank. But after comparing it with the double temple of Anu and Abad at Assur, later investigators have identified this so-called harem at Khorsabad as a group of temples dedicated to the three tutelary deities of the royal person. Two of these open into a common court as in the temple at Assur, but all three are very similarly arranged, the cella and subordinate rooms of each being completely independent of the others. Behind this group rose a magnificent stage-tower of seven stories from which Botta cleared away the masses of bricks and debris which covered it. The lower stories were almost intact and were ornamented with vertical grooves covered with stucco and painted various colors like the stage-towers of Babylonia. Botta believed the ziggurat to have been an observatory, for tradition had it that the Babylonian priests were famous astronomers. Today, however, we are in doubt as to the precise use of the stage-tower. It was, no doubt, closely connected with the temple ritual, but we know that frequently the actual shrine was not upon its summit but on the ground floor, as in the temple at Assur. This was probably true of the temple connected with the palace at Khorsabad also.

All the royal palaces of Assyria were provided with this religious structure. Layard vainly dug test pits and tunnels in the mound of debris on the site of the

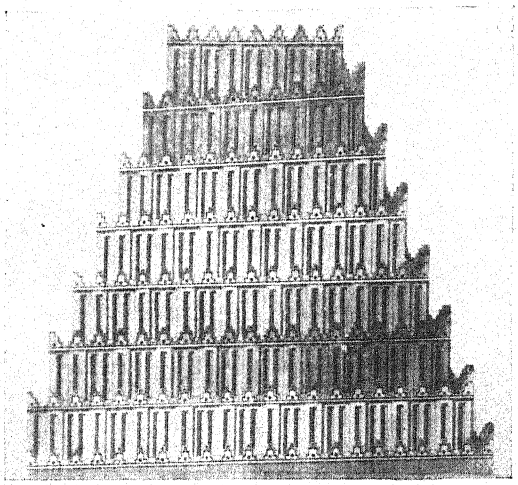


Fig. 173. — Ziggurat of the palace at Khorsabad.

ziggurat of the palace at Kuyunjik which he found within the walls of Nineveh. He believed that the stage-tower here was the sepulchre of the king like the pyramids of Egypt, but it was found to consist of a solid mass of masonry. Indeed, the cuneiform texts tell us that it was a religious structure and not a tomb.

Like all the Assyrian and Babylonian palaces, the one at Khorsabad had no outer windows. It was surrounded by a great wall which completely isolated it and which was pierced only by the great gates with their winged bulls and towers (fig. 174). The gate of the palace at Khorsabad is a typical example of these monumental entrances. On either side is a projecting base ornamented with two winged bulls carved in relief, and between them, the figure of Gilgamesh, the Babylonian national hero, strangling a lion. Few compositions equal the reliefs of these Assyrian friezes in the impression they produce of power and violent force.

As has been said, these handsome sculptures serve as bases for the towers that frame the gateway. Botta found at Khorsabad the remains of two great wooden posts which had been encased in gilded bronze; these also embellished the main gate of the palace. Around the entire building ran a line of merlons above a colored band of glazed tiles.

The most impressive feature of these majestic façades are the groups of winged bulls with human heads crowned with a mitre and three pairs of horns. These guard the palace gates. It is a derived form of the Babylonian human headed bull to which the Assyrian builders have given an appearance of strength and cruelty that is something entirely new. These monsters, with great wings and the claws of a lion, face outward. On their faces are curled beards resembling those of the Assyrian kings. With their mitres and horns they probably represent certain demi-gods who were supposed to defend the residence of the kings of Assyria (figs. 175 and 176).

The type is always the same and they always stand parallel to the palace walls beside the gateway. As the Assyrian palaces were built of sun-dried brick, the upper portion is usually completely destroyed. The clay has washed down into the interior where it fills the rooms, but the lions carved from slabs of alabaster have been preserved almost intact. As at Khorsabad and Kuyunjik, we find similar bulls at Calah, their ferocious heads standing out from the brick platform on the lonely desert.

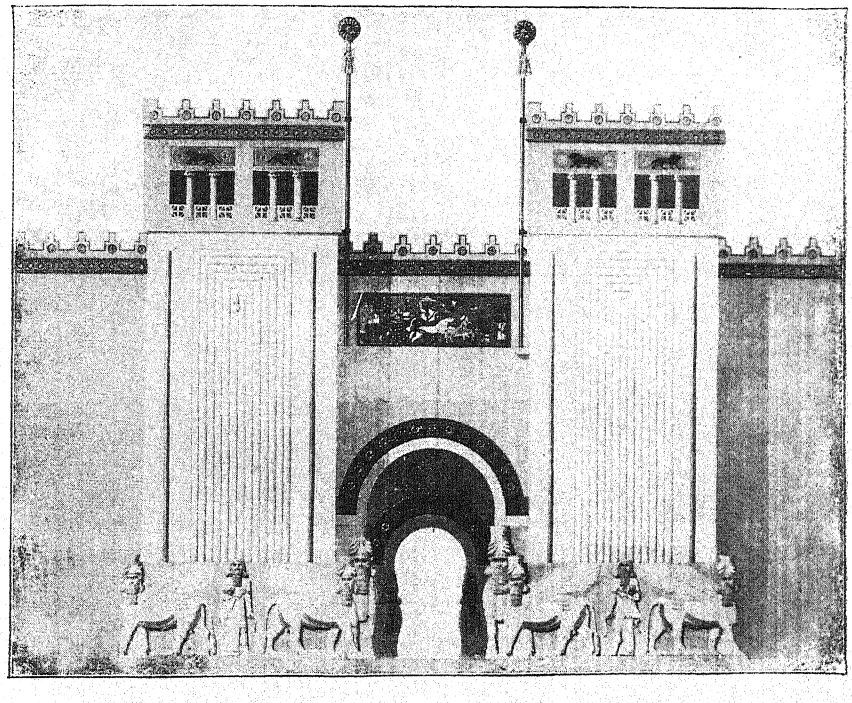


Fig. 174. — Gateway of the royal palace at Khorsabad. *(Restoration by Place.)*

Layard tells us of his emotion the night before he removed these figures from the royal palace at Kuyunjik, as he gazed at them for the last time upon the spot where they had stood for more than thirty centuries. While Botta was exploring the palace of Sargon at Khorsabad, Layard, who had been sent out by the British Museum, undertook the excavation of a palace near Mosul at a site called Kuyunjik. Here he found inscriptions which led him to believe that it had been constructed by Sennacherib himself. An interesting confirmation of his discovery has been found in the text of a cuneiform tablet acquired by the British Museum. In this inscription Sennacherib describes not only his conquests, but also the great work of transforming the little city of Nineveh into the fortified capital which his successors on the throne of Assyria deemed impregnable. Sennacherib completely demolished the ancient royal palace which Layard discovered beneath the mounds called Kuyunjik by the Arabs. This was not the palace of Sargon however; that was at Khorsabad some miles distant. "I enlarged the platform of the old palace", asserts Sennacherib, "and reinforced its upper portion with great slabs of hewn stone. Rooms of gold and silver, of crystal, alabaster and ivory built for the dwelling of my God". This confirms the existence at Kuyunjik of a temple or temple group like the triple one at Khorsabad which Botta believed to be the royal harem.

"Cedar, cypress and pine", continues Sennacherib, "timbers from Sindai and thick bars of bronze did I set in the doorways, and in the dwelling-rooms did I leave openings like lofty windows. Great statues of alabaster wearing

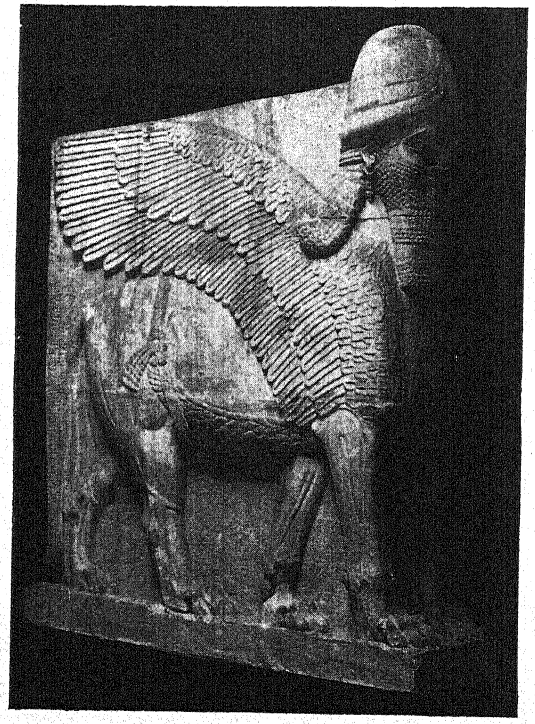


Fig. 175. — Winged bull from Khorsabad. *(Louvre.)*

crowns with horns did I set on either side of the doorways". He evidently refers to the figures ornamenting the doorways inside the palace. He devotes a special paragraph to the great winged bulls at the palace gates: "Great winged bulls of white stone did I carve in the city of Tastiate beyond the Tigris for the great gates, and great trees did I cut from the neighboring forests to build frames on which to transport them. It was in the month of Iyar, and the floods impeded their transport. Those of the company who brought the winged bulls dispaired of success. With much effort and amid many difficulties were they brought to the gates of my palace."

The inscription on this cylinder proves Sennacherib to have been another such architect and builder as Hadrian, for he directed his projects in person. He relates interesting details of the hydraulic works which he installed to provide the palace with water and of the means he took to light the building. The light problem must have been a serious matter for the architects of Assyria, for the massive walls of sun-dried brick had to be thick indeed to support the weight of the heavy vaults. "The darkness of the old palace and its rooms have I transformed into light." He also describes the doors which he installed and the decoration of the halls with painted tiles, marble slabs and lapis lazuli.

The interest which Sennacherib displayed in the construction of his palace shows him to have been an able political leader. He was ambitious to possess a palace in keeping with the glory and power of his country, and we know that his palace at Nineveh won the admiration of all the nations of Western Asia. "I, Sennacherib, the King of hosts, King of Assyria, following the counsels of the gods and applying all my skill and will, have brought this work to a successful conclusion."

Sennacherib's palace at Nineveh was occupied by his successors who made from time to time the repairs and restorations always so necessary in the buildings of that country. We now know that the walls were constructed with a view of covering the building with a vaulted roof. The thickness of the walls and the

narrow rooms plainly show that the roof was the most important problem for the builders and architects of Nineveh. The buildings of that time are represented in some of the reliefs, and we see that vaults and domes were a very common feature. Flandin, the artist who collaborated with Botta in the reports of the excavations at Khorsabad, was the first to apply the vault to his restorations of the buildings of Assyria. Layard, on the other hand, represented the buildings as roofed with horizontal beams and stone lintels when he gave to the press the results of his investigations at Kuyunjik. Botta, however, was right. Inside the rooms of the palace are found great blocks of clay, their lower sides curved and coated with painted stucco, which are fragments of the vaulted roof which had fallen in. Botta's successor, Place, discovered intact a great monumental arch above a door flanked by two winged bulls. He also found inside the platform at Khorsabad some vaulted drains similar to those in the substructures of Babylonia. These galleries have been carefully studied, and they furnish many interesting details of Assyrian structural technique. The bricks were moulded in the form of truncated wedges and fitted to the size of the vault. Some of the vaults are elliptical, or ogival, in order to lessen the strain of the pressure against the supporting walls. It is thought that the courses of brick were ingeniously laid slanting and forming an acute angle to the axis in order to avoid necessity of using a frame (fig. 178).

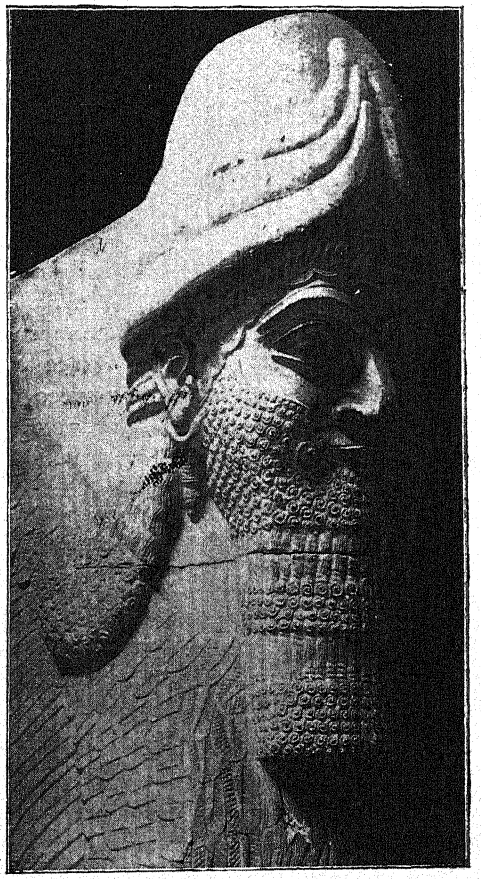


Fig. 176. — Head of Assyrian winged bull.

The halls were mostly rectangular and the brick vaulting was coated with brilliantly painted stucco. Below the springer of the vault there was usually a band of glazed bricks which separated the perpendicular wall from the curved surface above. Along the bottom a band of reliefs covered the crude wall of sun-dried bricks. This casing is a typical feature of Assyrian construction. Place calls the reception halls and royal apartments the "halls with the relief sculptures". This is the portion of the palace which we have already described as the selamlik. Here we still find in place a band of soft alabaster slabs carved

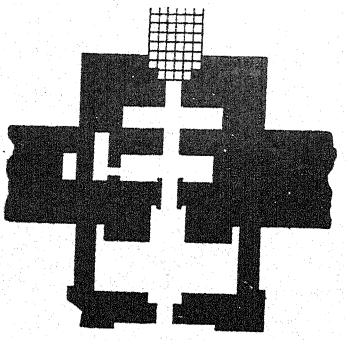


Fig. 177. — Plan of the entrance to the enclosure at Khorsabad.

in relief possessing an artistic value that is extraordinary. These reliefs are a graphic illustration of the chronicles of the Assyrian kings. We see their glorious victories and the savage reprisals they inflicted upon their conquered enemies. Sometimes they are at worship; often they divert themselves with hunts or banquets.

In the less important rooms we find painted stucco in the place of these handsome reliefs. Sometimes the walls are painted a uniform color and again they are polychrome. Place and Layard both found fragments of stucco decorated with bands of roses and rows of monsters and other figures painted in simple colors with outlines at once bold and graceful. The same decorative elements are found in the bands of glazed tiles at the springers of the vaults and the archivolts of the doorways, but they are themes developed in ancient Babylon before the coming of the Assyrian conqueror. On the floor was a pavement of brick or limestone which would not easily disintegrate, and in the centre of each room was a slab pierced with a hole which led into the drain below. It is now possible to picture to ourselves the interior of these royal palaces. The long halls, narrow enough to be spanned by a vaulted roof, were lined from floor to ceiling with colored figures and designs. They were dimly lighted by the faint illumination which filtered through the doorway and the high windows which pierced the thick walls.

Most of the buildings seem to have been of one story only, for no stairways have been discovered by the explorers which could have led to an upper floor. It is puzzling, therefore, to see in the reliefs representations of an upper gallery supported by small short columns extending around the roof of a building like a belvedere. This may explain the use of the fusts and bases of columns discovered in the palace at Kuyunjik; they may have been employed in these accessory galleries. As has been noted, the column was not an essential feature in Assyrian construction with its thick walls and massive vaults and arches.

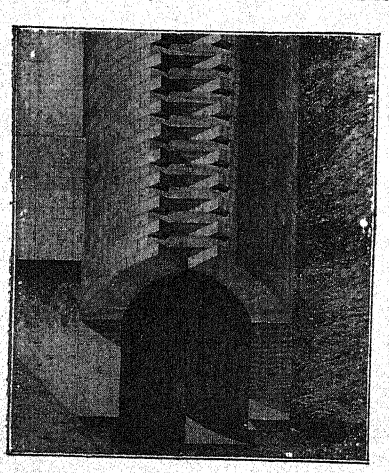


Fig. 178. — Vault of one of the drains at Khorsabad.

It is true, however, that the columns found at Kuyunjik may have served to support light interior structures like the canopies over the throne and the royal bed. The throne, like the one in the palace at Teheran today, was set in the centre of a sort of portico constructed of light material, so these columns seem to have been an element of luxury rather than a genuine

Relief and altar of Assur-nazir-pal III, discovered at Kuyunjik. *(British Museum.)*

architectural feature. Fragments of Assyrian columns with bell-shaped bases have also been discovered in the course of the recent excavations at Assur, but, generally speaking, they were but little used in the temples and palaces of Assyria.

The buildings of minor importance have crumbled away, raising the height of the platforms in the royal cities which were built upon a terrace, so it is extremely difficult to study the general arrangement of these cities. At Khorsabad the streets intersected one another at right angles, but we are able to trace them only by the limestone blocks with which they were paved. Many of these paved highways extended for a considerable distance beyond the limits of the city following the military roads which covered all Assyria. The walls and gates of an Assyrian city were very important features. Along the walls at Khorsabad we find square towers, and both walls and towers were crowned with battlements. As in the Orient today, the city gate was the meeting place of the citizens who assembled there to discuss affairs of common interest. The cool shade of the massive walls and arches made it a pleasant spot. At Khorsabad we find enclosures, or courts, within the fortified gateways which break the wall surrounding this royal city (fig. 177). Their strategic importance and their popularity as a meeting place explain the architectural importance of the gates of these Assyrian cities.

Fig. 179. — Statue of Nabu. *(British Museum.)*

We will now turn to sculpture, which is almost always purely decorative. The principal task of the Assyrian sculptors was to supply reliefs to cover the coarse brick walls of the royal palaces. These were carved from the soft alabaster which was plentiful in that country and which lends itself more readily to reliefs than to statues. We find few sculptures in the round, so important a feature of Babylonian art. Even with the winged bulls the sculptors show preference for relief sculptures. These have five legs, so that two might be seen from the front and four from the side, and this figure was never carved in the round.

Only two statues have been found at Kuyunjik. One of these represents a god, for the head bears the mitre and horns which characterized the gods and demi-gods of Assyria (fig. 179). It is interesting to note that the hands of this figure are folded like those of the Babylonian statues of Gudea reproduced in the previous chapter. But instead of the shaven face of the Sumerian ruler, we see the curled beard of the kings and warriors of Assyria.

Fig. 180.
Statue of Assur-nazir-pal.
(British Museum.)

The other statue from Kuyunjik is a small portrait sculpture of Assur-nazir-pal (fig. 180). In one hand is a sceptre, the symbol of life, ending in a characteristic crook, which was also carried by the kings of Egypt. In his other hand is the short whip he used to curb the tamed lions which followed the fierce conqueror. His long robe is interesting with its spiral bands like those seen on the robes of the Babylonian figures; indeed, we are reminded constantly of the art and civilization of the Babylonians.

In our study of the palace architecture of Assyria we noted the reliefs which decorated the brick walls and covered up their coarse surface. These relief carvings constitute the foremost achievements of the Assyrian sculptors. We observe a certain variety of style. At Khorsabad the figures are larger; the scene is represented in a single plane with scarcely any indication of the surroundings. At Kuyunjik, on the other hand, the art is more highly developed and in addition to the main theme we see a number of supplementary scenes of an anecdotal character. To make the picture seem more real, an effort has evidently been made to represent the vegetation characteristic of the locality in which the action occurred. Where the royal campaigns are portrayed we can see plainly indications of foreign surroundings, much as though the artists had accompanied the armies in order to note the peculiarities of the countries they overran.

Although the Assyrian sculptors confined themselves chiefly to sculptures in low relief, their work is not lacking in value. It affords us a complete picture of the lives of these conquerors of Western Asia and of their subjects at a period when Nineveh was supreme. It is of enormous aid in the interpretation of historical texts and in the restoration of the great monumental structures (fig. 167). Hunting and war scenes are rendered with a realism that defies exaggeration; the Assyrian sculptor recorded with a precision that is extraordinary the forms of wild animals in repose and in flight, pursued by the hounds or wounded by the arrows of the royal huntsman (fig. 181). A certain Semitic modesty had, with few exceptions, prevented the study of the nude human form, consequently the draped figures betray an ignorance of the lines of the body beneath the robes. In the representation of animal figures, on the other hand, closer study and much experiment resulted in a high state of perfection. There are many battle scenes, assaults of fortresses and sacrifices of prisoners over which the king presides, while the scribes make careful note of the spoils.

Not all the reliefs are purely historical; we perceive the life of the camps.

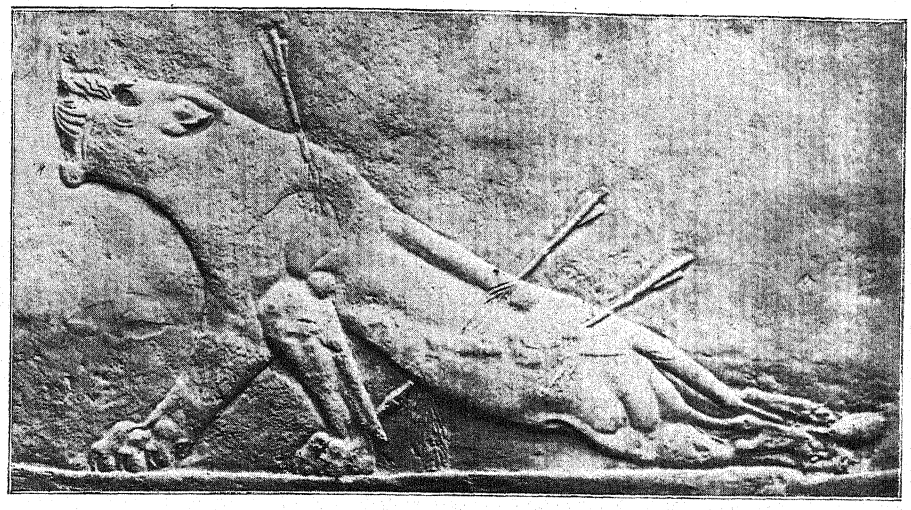


Fig. 181. — Wounded lionness in a hunting scene from the palace at Kuyunjik. *(British Museum.)*

Within their tents the soldiers bake bread and prepare milk for the table. In a scene representing the capture of Lagash, the women, liberated by the conditions of surrender, leave the place with their children; one of them kisses the child which she carries at her breast with an expression of tragic sorrow. We also see the king in his lighter moments, in the royal harem, in his gardens or at court banquets, and a thousand and one details of court life are faithfully presented. The robes of the court dignitaries are bordered with richly embroidered designs and luxurious fringes. Racial characteristics are strongly marked, not only in the exalted personages with their hair hanging in long ringlets and their majestic beards, but also in the representations of women, eunuchs and court functionaries. (Fig. 183 and Plate XV.)

The peoples with whom the Assyrians came in contact also appear in these reliefs. There is a square column, or obelisk, in the British Museum on which are portrayed the messengers of the different nations who brought tribute to Shalmaneser II. Among them the Jewish ambassadors are easily recognized by their racial peculiarities.

Even in the figures of supernatural beings we find the Assyrian features strongly marked (fig. 182 and 186). The patron deities of the king are frequently represented with the crown, the great wings and the pomegranates which were the symbols of life. Sometimes there are two gods kneeling on either side of a conventionalized tree, a favorite theme in the paintings and textiles of the Orient.

One of the arts of Assyria which achieved a high state of development was metal working. When the Assyrian palaces were first explored, copper plates were found which are supposed to have covered the great wooden gates, or doors, at the palace entrance. A more sensational find which proved the skill of the metal-workers of Nineveh was the discovery by Rassam of the bronze strips which covered the doors of a palace at Balawat. These are now in the British Museum. (Plate XVI.) The doors were divided into parallel bands on

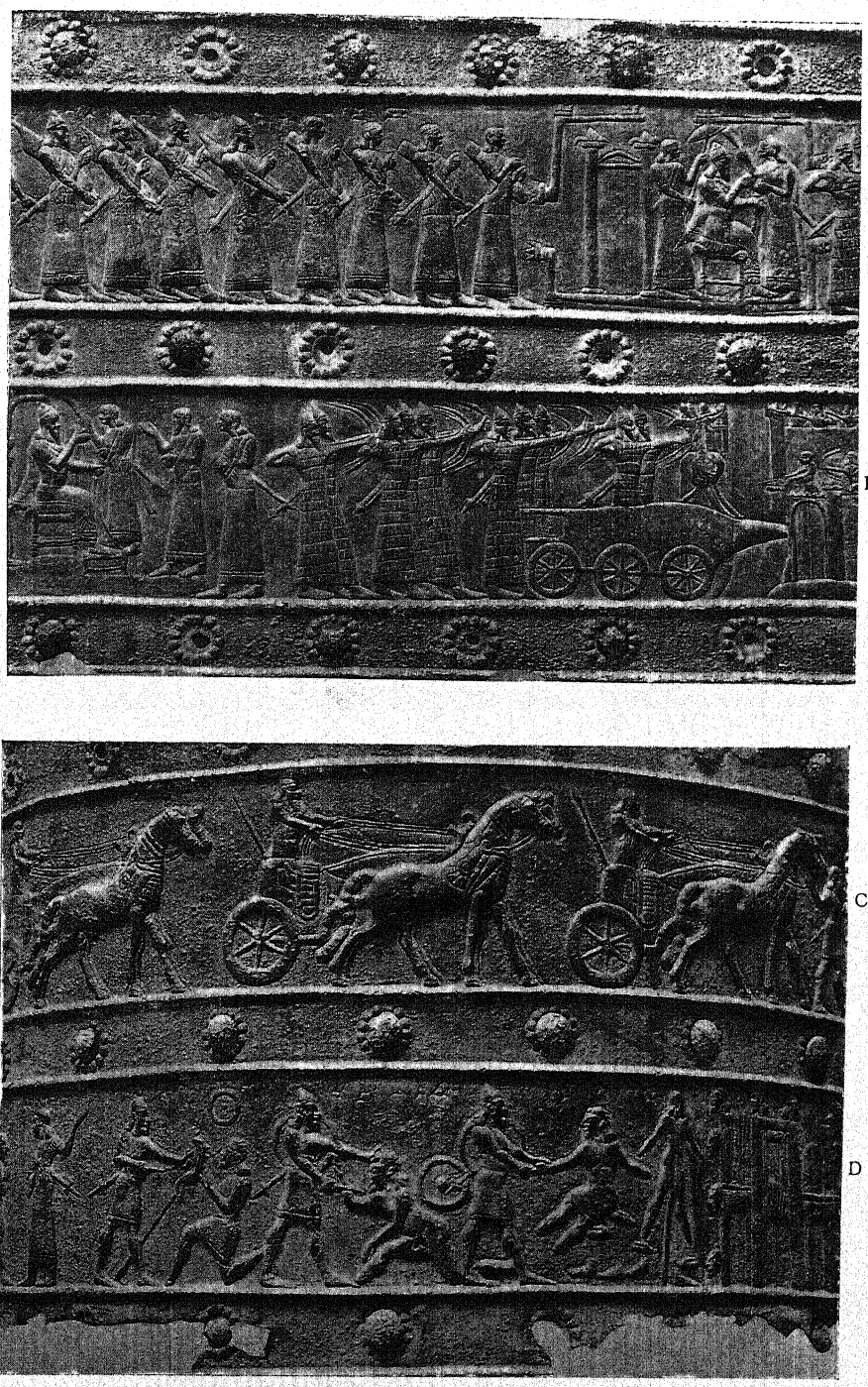
Fig. 182. — Assyrian deity. *(British Museum.)*

Fig. 183. — Assyrian eunuch. *(Museum of New York.)*

which were represented the war scenes, sacking of cities and sacrifice of prisoners which we find on the stone reliefs.

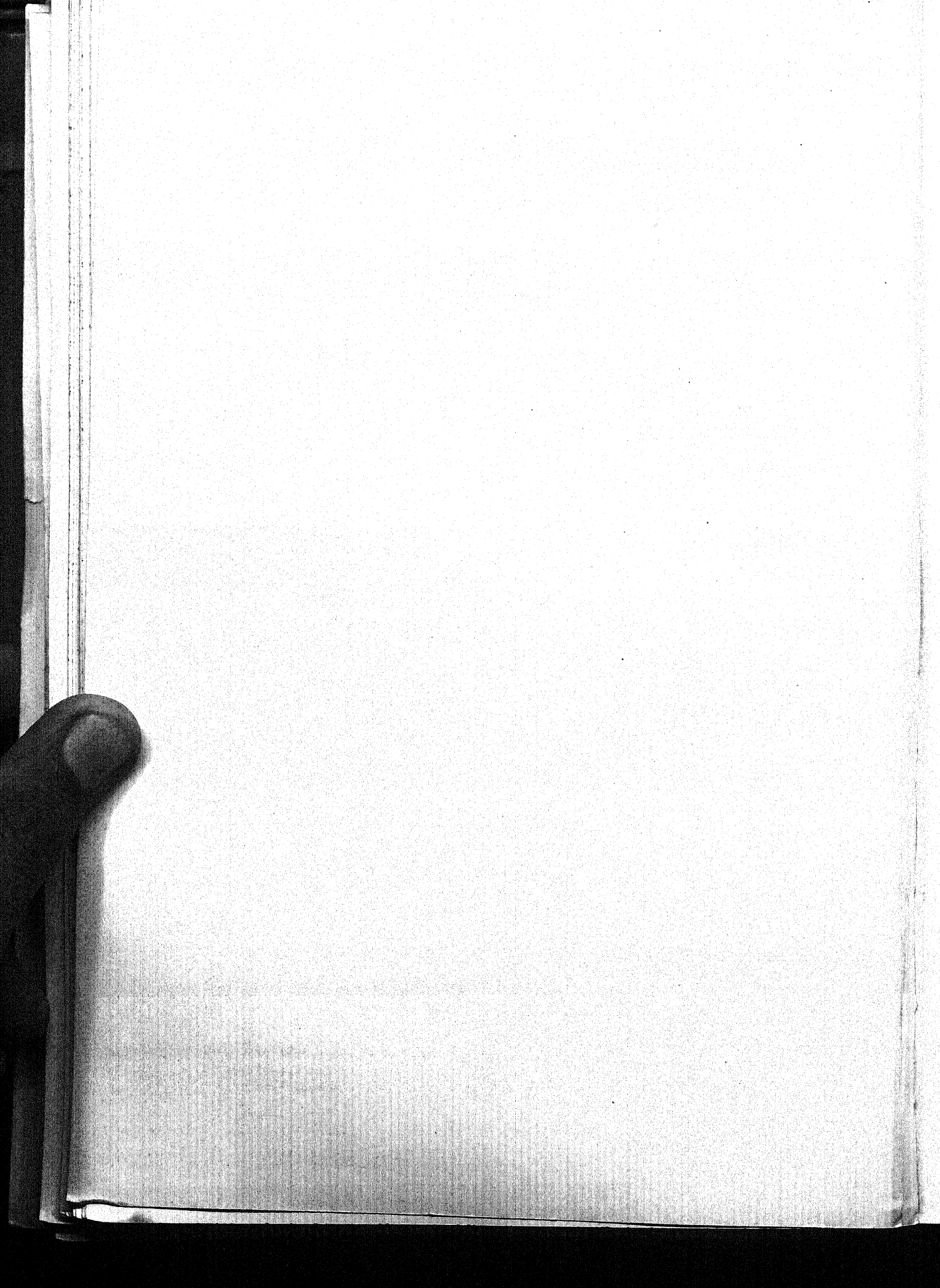
Sculpture and architecture are the two arts which have furnished us with the most abundant material for the study of their development in the Assyrian Empire. We learn something of the art of painting as practised by these people from the remains of their brilliantly colored glazed tiles. The Babylonians taught the Assyrians this art, and we note the same taste for blue and green and the same decorative elements, such as conventionalized roses, winged monsters, animals, and human figures in an attitude of worship. Some portions of the palace at Khorsabad are found to be richly embellished with these enameled bricks, not only inside, but on the façades as well (fig. 184). The study of this industry is most important to the history of art, for we shall meet with it again in Persia; from the empires of Western Asia it passed on to the Arabs who, in turn, taught it to Europe.

Gem-cutting and glass-making were also known to the Assyrians, although they did not attain the high state of perfection in these arts which they did in Egypt. Works of this sort which were found in the royal palaces at Kuyunjik and Khorsabad were in an exceedingly bad state of preservation. Nor do we find in Assyria the handsome royal tombs which have proved such a mine of wealth in Egypt. Both in Assyria and in Babylonia the monumental type of tomb was unknown. The dead were encased in crude pottery coffins and unaccom-



BRONZE RELIEFS FROM THE GATES OF THE PALACE AT BALAWAT. *(British Museum.)*

A. The king directs the siege of a city from his tent. — B. Assyrian archers with a catapult at the assault of a besieged city. — C. Assyrian chariots. — D. Execution of prisoners.



panied by any funeral trappings of consequence, so it is not strange that glass, jewels, arms and furniture are rarely found in the ruins of palaces that have been sacked a hundred times. The minor arts were often influenced by the suggestions presented by early Egyptian types and models, for Egypt was undoubtedly the venerable teacher of all the nations of antiquity. Mesopotamian art in its turn exerted a strong influence upon the mountain peoples of the north like the Hittites and also made important contributions to the architectural styles of Persia.

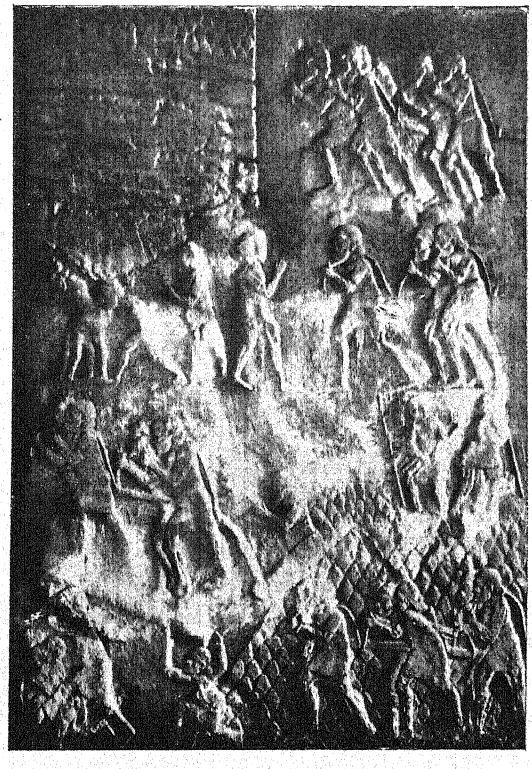


Fig. 184. — Captives transporting beams and other building materials. *(Louvre.)*

Moreover, we now understand that the imperial art of Assyria exercised a certain influence on the sources of Greek art. Some of the pre-Hellenic reliefs of Crete and Mycenae reflect Assyrian art, particularly in the grouping of the figures in the hunting and battle scenes. In this respect we have already seen that the Assyrian sculptors achieved admirable results. We find many masterpieces among the Egyptian statues, but the historical reliefs of this nation were never anything but a childish and primitive effort. The Pharaoh is a giant surrounded by his gods who crushed a confused mass of enemies. There is neither foreground, background nor perspective of any sort; nor does order, realism or clearness exist in the Egyptian reliefs. In the masterly representations of the Assyrian kings, in battle or at the hunt, we see an attempt to picture the landscape and portray the action in a natural manner. The perspective is

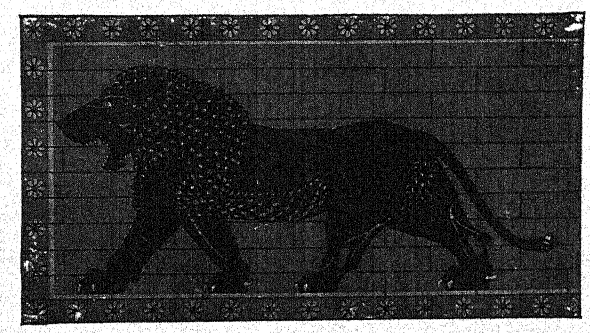


Fig. 185. — Enameled tiles from Khorsabad.

faulty, it is true, but the scenes betray a sense of order and sequence (fig. 184). Some of the Assyrian reliefs are an anticipation of Trajan's Column and the other historical reliefs of the Romans. Indeed, it is startling to see some of the achievements of classical art foreshadowed in the reliefs of Khorsabad and Kuyunjik which were carved a thousand years before. It is possible that the artists of Greece and Rome invented this technique anew; but this picturesque Assyrian style certainly influenced pre-Hellenic art, and it may have been passed on in this manner to the classical sculptors who were unaware of its origin.

Summary.—The art of ancient Babylonia was the predominant factor in the palaces of Assyria. The first important Assyrian temple was that of Assur, the capital of the country when it was still subject to Babylonia. Here we find two *cellae* and two stage-towers of three stories, forming a double temple. The royal palaces of Assyria were set upon platforms of sun-dried bricks. The most ancient was that at Calah, now called Nimrud by the Arabs, to the north of Assur. Still further north was Nineveh, the last capital, near the modern town of Mosul. At Nineveh, in addition to the palace in the city itself, now Kuyunjik, there was the palace of Sargon outside the walls at what is now known as Khorsabad. All these palaces are set within an enclosure of thick walls in which there are no openings except the main entrance. Their gateways are embellished with stone slabs carved in relief representing winged lions. The roofs are vaulted and their numerous apartments are distributed around three sides of a court and consist of three main groups. One was devoted to religious purposes and beside it was a stage-tower; the second consisted of the apartments of the king; and the third was composed of the servants quarters, store-rooms and the like. The walls of the king's apartments were covered with stucco and glazed tiles and in certain halls we also find slabs of soft stone carved in relief. These reliefs are the most important specimens of Assyrian art which have come down to us. Here we find represented many scenes from the lives of the kings. Only rarely did Assyrian sculptors carve figures in the full round.

The industrial arts of Assyria often imitated Egyptian models.

Bibliography. — An excellent general survey of the subject is found in vol. II of *Histoire de l'Art dans l'Antiquité*, by PERROT AND CHIPIEZ. For Khorsabad, see P. E. BOTTA: *Monuments de Ninive*, 1850. — F. PLACE: *Ninive et l'Assyrie*, 1867. — For Kuyunjik, see A. H. LAYARD: *Nineveh and Babylon*, 1867. *Nineveh and its Remains*, 1854. — For the temple of Assur, W. ANDRAE: *Der Assur und Adad Tempel*, 1907. *Die Festungswerke von Assur*, 1913. — H. RASSAM: *Assur and the Land of Nimrot*, 1897. — L. W. KING: *History of Sumer and Akkat*, 1910. — A. OLMSTEAD: *History of Assyria*, 1923. — R. W. ROGERS: *History of Babylonia and Assyria*, 1900. — M. JASTROW: *Religion Babyloniens und Assyriens*, 1904. — W. BOSCAWEN: *The making of Nineveh*, 1910. *Guide to the Babylonian and Assyrian Antiquities*, 1908.

Periodicals. — *Beiträge zur Assyriologie*, Leipzig. — *Zeitschrift für Assyriologie*, Strassburg. — *Babyloniaca*, Paris. — *Proceedings of the Society of Biblical Archaeology*, London. — *Revue d'Assyriologie*, Paris. — *Mittheilungen der Deutschen Orientgesellschaft*, Berlin. — *Mittheilungen der vorderasiatische Gesellschaft*, Berlin. — *American Journal of Semitic Languages*, Chicago. — *Journal of the Royal Asiatic Society*, London.

Fig. 186. — Assyrian god. *(New York Museum.)*

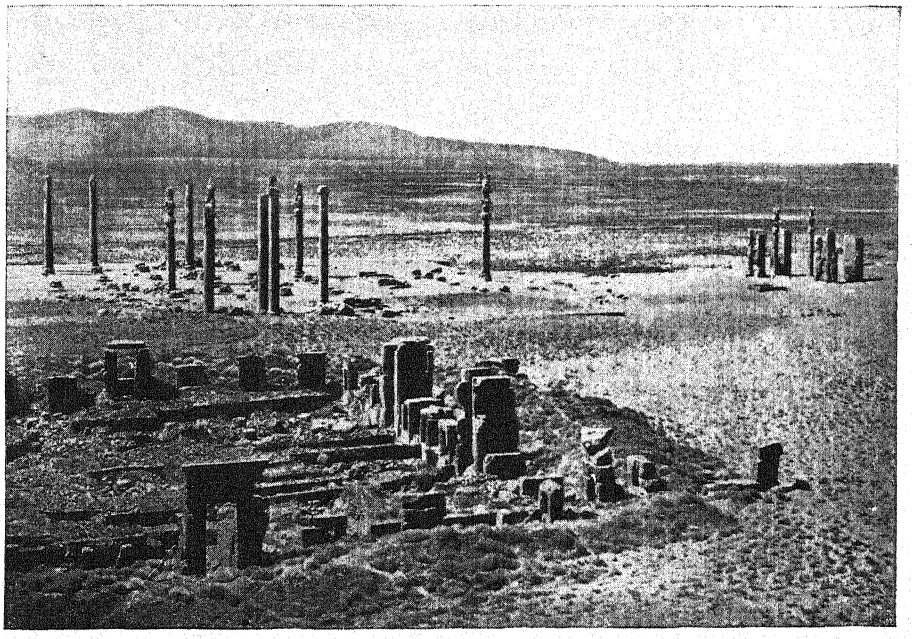


Fig. 187. — Terrace at Persepolis and the remains of the royal palaces. *(Dieulafoy.)*

CHAPTER VIII

THE ART OF ANCIENT PERSIA. — THE CAPITALS OF THE EMPIRE. THE PALACES AT PERSEPOLIS. — ROYAL TOMBS. — SCULPTURE AND CERAMICS.

The sudden destruction of Nineveh by a horde of Scythian invaders resulted in the complete overthrow of the power of Assyria which was centralized in the capital of the country. But the Oriental world could not live without a master. For the time being, Babylon and Egypt restored their former governments. In Babylonia there was a genuine artistic renaissance under Nebuchadnezzar and his son, the devout Nabonidus, and we have already studied the revival of art in Egypt under the Saite kings. It was not long, however, before the memory of the despotic rule of Nineveh over the whole of Western Asia awakened a lust for power in the heart of the strongest of them all. This was the monarch whom the Greeks called the Great King and who lived in the highlands of Persia, a

Fig. 188. — The cities of ancient Persia.

mountainous country which bordered on Mesopotamia to the west and extended southward to the sea.

The spread of the new empire was rapid and encountered few difficulties, for Assyria had accustomed the nations of Western Asia to a state of servitude. The first nucleus of the new state was formed by the Median tribes who gained great prestige when they aided the Scythians to sack and burn the city of Nineveh and retired to their native mountains with their share of the spoils. Later a number of leading Persian families closely associated under their first king, Cyrus, subjugated their Median allies and brought all Iran under one head. It was not difficult for this vigorous young nation to put an end to the short-lived independence of the ancient kingdoms of the Orient. Cambyses again subjected Egypt to the humiliation of bowing the knee to an alien lord, and Babylonia and the maritime states of Asiatic Greece soon became Persian satrapies. Even Phoenicia, which had more or less successfully resisted the domination of Assyria, now fell a prey to Darius and lost command of the seas. For the first time in history an Asiatic army crossed the narrow arm of the sea which lay between Europe and the Orient.

The two first capitals of the new empire were Ecbatana and Pasargadae. Ecbatana had been the seat of government of the Median kings and it was natural that Cyrus and his successors whould be desirous of restoring and occupying the capital of his former allies. Herodotus who knew of Ecbatana only by hearsay wrote a fanciful description of this city which has become more or less of a legend. He told of seven walled redoubts, each painted a different color, and he even gave the dimensions of each. Polybius, usually so exact in his statements, describes the royal palace in the following terms: "Although it was constructed entirely of cedar and cypress, it was plated everywhere. The rafters on the ceilings, the lining of the walls and the columns of the porticos were covered with metal. Gold and silver gleamed on every hand, even the tiles on the roof were silver-plated." The only indication of the site of the ancient city of Ecbatana is a single stone base at the modern town of Hamadan, but the descriptions of the historians, if taken with a certain amount of caution, will give us an idea of other buildings that are better known. We immediately perceive the important part taken by wooden material in the early architecture of Persia, a country abounding in forests at that time. Later, at Persepolis the upper portions of the buildings were always of wood.

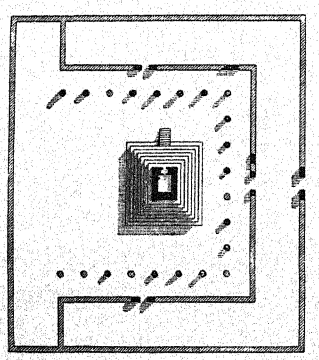


Fig. 189. — Plan of the Tomb of Cyrus.

Pasargadae was the home of the family of Cyrus, and both he and his son, Cambyses, continued to live there. The ruins of this city are located in the heart of Persia, not far from the little town of Murghab on a small plain surrounded by steep mountains and defended by narrow defiles. The caravan road now crosses the bare platform which once bore the palaces of the kings of Persia. Only a broken column here and

there, juts of walls and an occasional door-jamb bearing the portrait of Cyrus carved in relief remain of the palace of the first Persian conquerors. It consisted, so far as we can ascertain, of a pillared portico on every side with the living apartments of the king in the four corners at the ends of the porticos. The entire centre of the building was occupied by the reception hall as in the great palaces at Susa and Persepolis which we shall study later. Already, the columns may have been of the type which became traditional in the architecture of Persia.

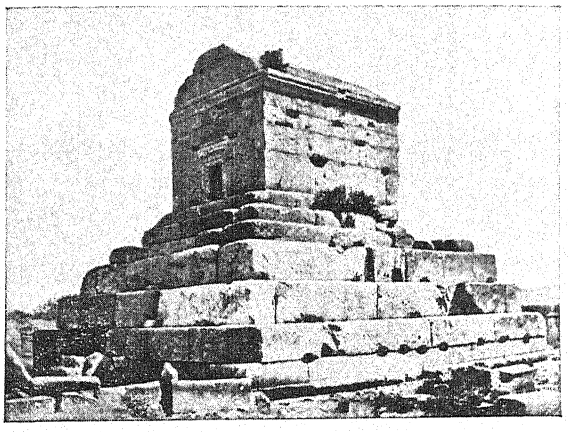


Fig. 190. — The Tomb of Cyrus at Pasagardae. *(Dieulafoy.)*

There is, however, on the plain of Pasargadae a monument, still almost intact, which is another early effort of that eclectic art which drew upon all the vassal states of Persia for its architectural elements. This is the Tomb of Cyrus, long identified by modern travellers as the mausoleum described by ancient writers, which Alexander visited and piously restored (figs. 189 and 190). It is a funerary chapel set upon a small stepped base about thirty five feet high. Its importance is due chiefly to the fact that it once contained the sarcophagus of the Great King. The inner chamber measures scarcely six square yards and is roofed with flat slabs the tops of which slope on either side to the cornice, giving the structure an appearance that is anything but Oriental. Indeed, one might almost take it to be Greek. There is a double doorway ingeniously arranged in such a manner that only one person could enter at a time and must close the first door before he opened the second. Both tomb and base were set within an enclosure surrounded by a colonnade of which a few traces remain. This little building was never imitated by the later Persian architects, and we shall see that the successors of Darius constructed their tombs along very different lines. The Tomb of Cyrus rather resembles the sepulchres typical of Lydia, and it is evident that even in the time of the Great King the Persians were already borrowing ideas from the Asiatic Greek provinces. We shall see a number of points of contact between the art of Persia and that of Greece, but the former country always retained the customs and esthetic feelings of an Oriental monarchy; its mission was to inherit and carry on the work of Assyria.

Rude Pasargadae not only guarded the remains of Cyrus, but continued to be the holy city to which his successors repaired to be crowned. This bare country, however, was hardly appropriate for the capital of a great empire, and Darius transferred his seat of government to a site further to the north, where he set his palace in a new capital better suited to the multifarious requirements

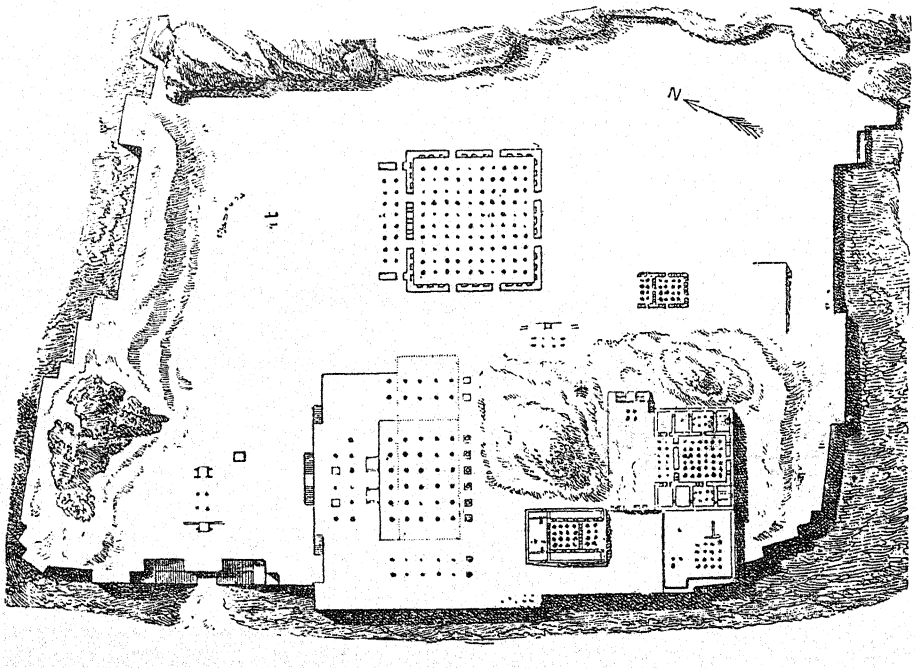


Fig. 191. — Plan of the platform at Persepolis.

of a great court. This was Persepolis. Not only did Darius himself construct two or three edifices here, but his successors embellished the city with such ostentation that it became proverbial for its pomp and splendor throughout the ancient world. Alexander, after he had marched in triumph across all Asia, wished to dwell on the terrace of Persepolis, for it had been the residence of the ruler of the world.

After the dismemberment of the empire of Alexander the kings of the Sassanid dynasties abandoned the palaces of Persepolis and the wooden roofs of these buildings were burned or rotted away. The location of the ruins in the valley along one of the main caravan routes has hastened its destruction, but its site was never at any time forgotten. Consequently the exploration of these remains did not offer the sensations afforded by the discovery of the palaces at Nineveh buried beneath great mounds of clay.

Since the end of the Eighteenth Century the curious traveller to Persia has noted with interest the ruins on the terrace at Persepolis, and from the descriptions of early visitors we know that they have greatly deteriorated during the past century. Their excavation has yielded few surprises, for the remains were all above ground and the great stone columns are still to be seen standing upon the original level of the platform (fig. 191).

The first to make a careful study of these structures and draw a scientific plan of the terrace was a Frenchman by the name of Flandin, the same who later succeeded Botta in the exploration of Nineveh. After Flandin, another French expedition headed by Dieulafoy made a study of the ruins in 1885 and

published a series of interesting photographs which still constitute some of the most important material we have for the study of Persian art. In addition to his work at Persepolis, Dieulafoy explored another royal palace of the same character at Susa, the ancient capital of Elam. Here, too, the kings of Persia had a royal residence. The remains of still another Persian palace of the same type were discovered by Koldewey at Babylon, and it is surprising to find that the kings of Persia constructed an open palace with colonnades on the hot Mesopotamian plain, where the climate seemed to require the massive wall-construction of the Babylonian type.

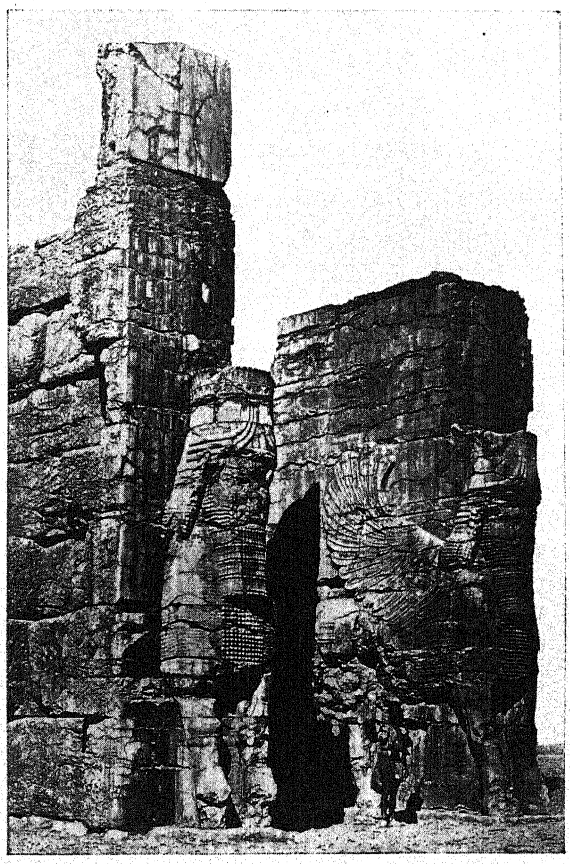


Fig. 192. — Propylaeum at Persepolis. *(Dieulafoy.)*

Persian art was always a royal or dynastic art; the only buildings of importance were the palaces of the kings. This fact, together with the rocky character of the country which does not permit the element of surprise always accompanying an excavation, leads us to believe that no new archaeological discoveries of importance await us in the Persian field.

To return to the ruins of Persepolis, the platform supporting the palaces is a vast substructure extending to the foot of a rocky slope. Upon the summit of this steep mountain were the altars for the sacred fire worshipped by the Persian people. These are the only religious monuments of ancient Persia that have come down to us. The mutilated remains of the royal palaces occupy almost the entire terrace (fig. 191). The photograph reproduced in figure 187 is part of a panoramic view of the platform taken from the base of the slope. It is interesting to note that there are no walls or fortifications on the platform at Persepolis of which any trace remains. Evidently the kings of Persia felt amply protected by the steep mountains and narrow passes which defended their capital.

The stairway ascending the great terrace consists of a double ramp which

Fig. 193. -- One of the columns of the Propylaeum at Persepolis.

is ornamented with magnificent sculptures in relief. Close to the head of the stairs is a handsome propylaeum, or monumental entrance, flanked by the winged human-headed bulls so characteristic of Assyrian decorative architecture. The Persians did no more than copy these figures and employ them in the same manner, although they are set facing the front and not the sides as in Assyria (fig. 192). The propylaeum faces the edge of the platform and is set symetrically upon the axis of the double stairway. It is a sort of open portico, for on either side were two columns (fig. 187).

The other buildings are found distributed about the platform. No preconcerted arrangement seems to have been observed, and they were the work of various periods. Leaving the propylaeum and turning to the right, the first monument to strike the eye of the visitor would be the Hypostyle Hall of Xerxes. Here we find thirteen mutilated columns still standing, the largest at Persepolis. This was one of the largest columned halls ever built by the hand of man; its columns are almost as high as those of the main gallery at Karnak, and the structure covers a larger area than the great hypostyle hall of the Pharaohs. Including the porticos, it is approximately 375 feet wide and 300 feet deep, and its columns with their capitals are over 63 feet high (fig. 193). Its arrangement is most original; the entire structure was set upon a platform raised above the main terrace, and there were three great detached colonnades which served as porticos in front and on either side. In the centre was a hall supported by a forest of columns of the most complicated type known to Persian art. The restoration of the building is somewhat open to question. The earlier explorers and later Dieulafoy believed that the main hall was separated from the exterior colonnades by walls, while Perrot and Chipiez attack this hypothesis, asserting that both the porticos and the central hall were open on the sides and admitting only the possible existence of balustrades and hanging curtains (fig. 194).

To one side of the Hypostyle Hall lie the remains of another building which was undoubtedly intended for state receptions. This is the so-called Hall of a Hundred Columns, the arrangement of which is also somewhat doubtful.

Along its front extended a double corridor with a winged bull at either end. Behind this porch was the building proper which consisted of a single large hall, its flat roof resting upon ten rows of columns. Of the walls that enclosed this building only the doorways remain standing and a series of niches or blind windows which faced the interior. These doorways and niches are of stone; the remainder of the wall must have been composed of brick like the walls of the buildings of Assyria and Babylonia.

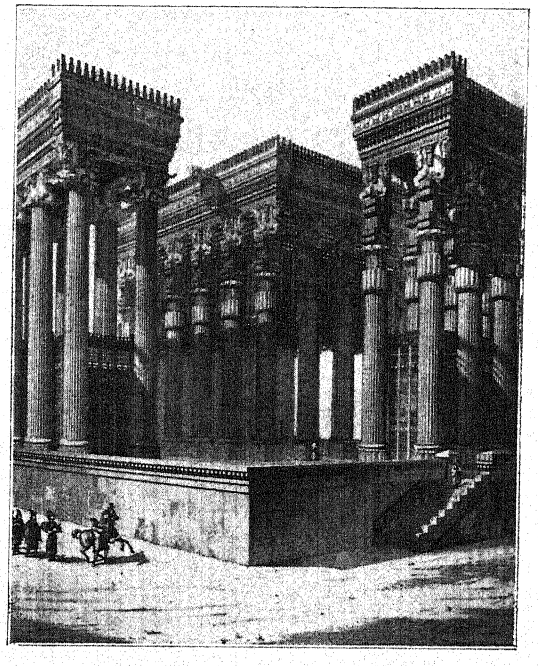


Fig. 194.— Restoration of the Hypostyle Hall of Xerxes at Persepolis. *(Perrot and Chipiez.)*

We also find on the terrace at Persepolis the ruins of other large buildings which are supposed to have been the royal palaces containing the apartments of the kings. One of these was the first residence erected by Darius in the new capital and is directly behind the handsome columns of the Hypostyle Hall. A second palace was that constructed by Xerxes upon the southern corner of the terrace. Both are similarly arranged and are believed to resemble the palace of Cyrus at Pasargadae, a rectangular enclosure containing a columned hall in the centre and the various apartments at the sides and in the corners. The walls were of brick and covered with enameled tiles; only the doorways and the niches distributed about the interior of the building were of stone. The latter were decorated with carved reliefs (fig. 195). We know that the upper portion of the building was of wood, for at the top of the stone antae and pillars we find carved indentations which still outline the profiles of the wooden beams that once supported the roof. On the pillar to the left of the photograph of the palace at Persepolis (fig. 195) we see plainly the indentation upon which the cornice rested.

It is especially interesting to note the inverted gola above the doorways, for this is an Egyptian form. We also see the eclecticism of Persian taste in the many Assyrian features such as the raised platforms, the winged bulls and the glazed tiles. To these is added an element so typically Egyptian as the cornice surmounting the doorway (fig. 196).

A Persian palace of this type is called an *apadana*, and we also find one among the ruins at Susa where the kings of Persia held their court during the winter months. Susa was one of the most ancient cities of Western Asia and

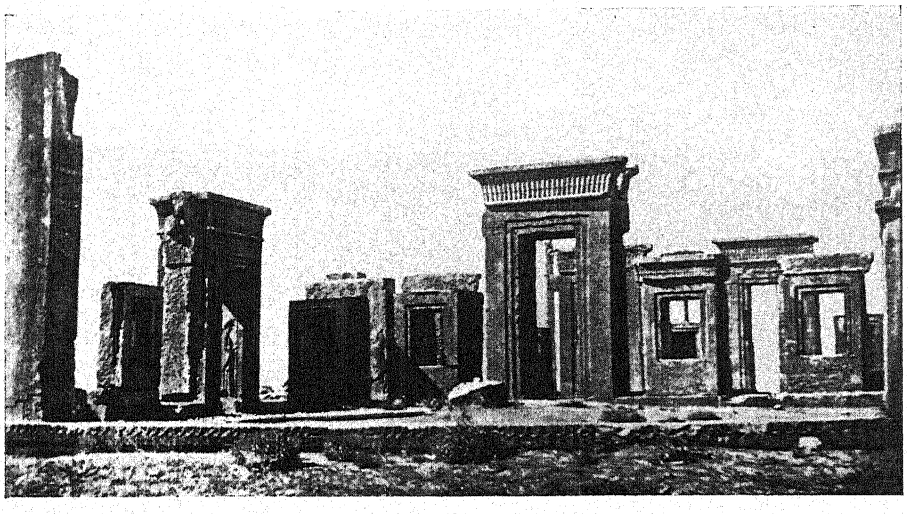


Fig. 195. — General view of the Palace of Darius at Persepolis.

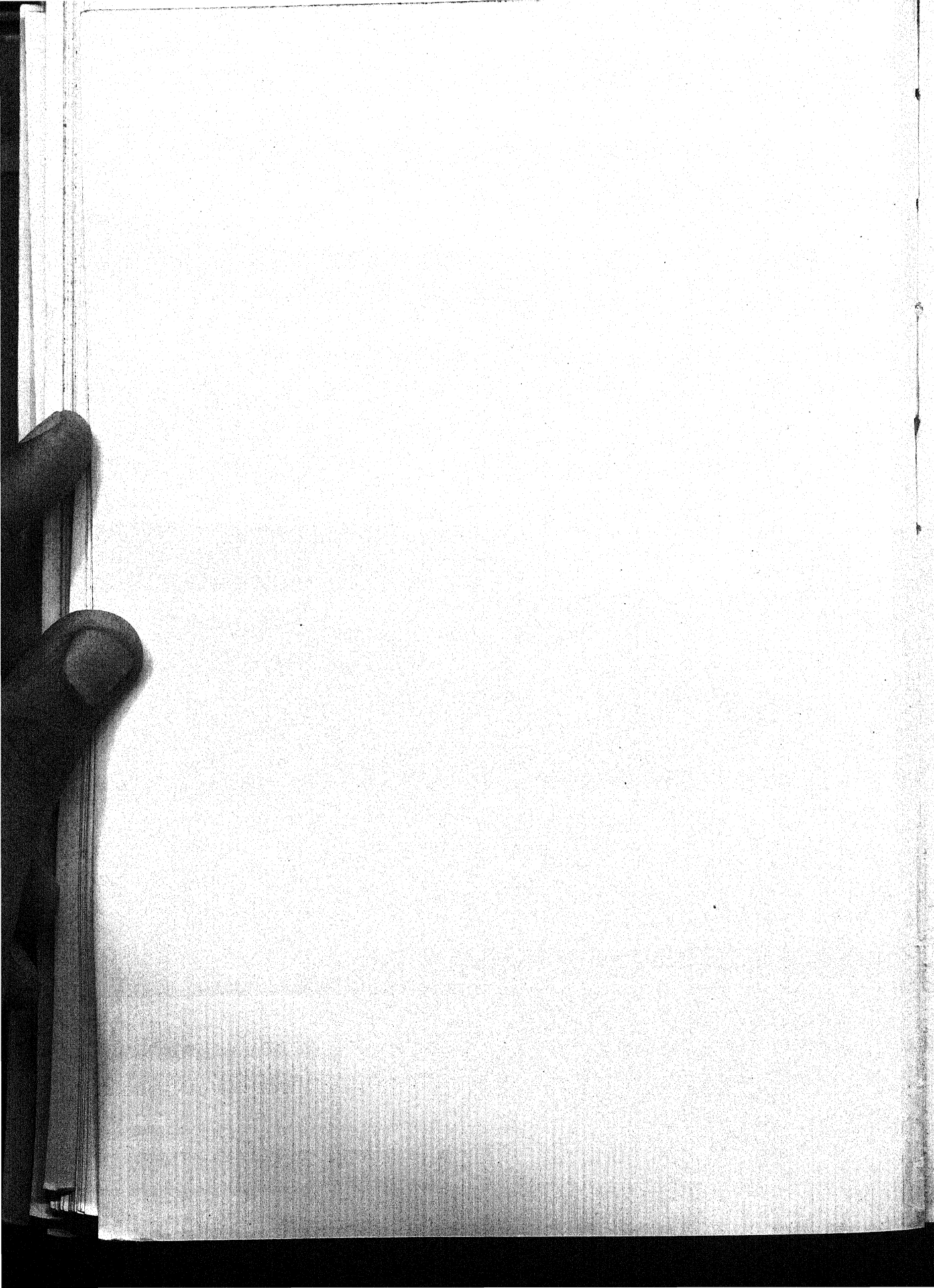
was the first capital of Elam before the rise of Babylonia and Assyria. Conquered by each of these nations in turn, it was overrun by the Persians in their earliest foreign campaigns, and Artaxerxes II built a palace over the ancient ruins which were already there.

As already noted, its plan was similar to those of the older Persian palaces, but here the material was largely brick. Only the columns and their capitals were carved from limestone by the sculptors of the *apadana* at Susa. The remainder of the building was of burned brick and glazed tiles, and it is here that we find the finest tiles manufactured in ancient times. Especially noteworthy is the so-called Archers Frieze which M. Dieulafoy transferred to the Louvre. Susa is situated on the slope of the mountains of Persia and it offered a considerable degree of security. At the same time its location was more central and convenient for the government of the western provinces and the maintenance of diplomatic relations with Egypt and Greece. Foreign envoys and Persian satraps repaired to Susa to confer with the mighty sovereign of Western Asia. Aeschylus places the action of his *Persae* at Susa, and it was here that the well known episode of the return of the vanquished from the Persian Wars is supposed to have occurred. Here, too, was ratified the treaty of peace with the Greeks (fig. 198).

We see in the palace at Susa the influence of the architecture of Assyria which was not very distant. As has already been noted, it is constructed of brick, and even the winged bulls beside the doorways were composed of enameled tiles. Only the columns and capitals of the palace at Susa correspond to the architectural type which originated in Persia.

Having made note of the features which Persia borrowed from Egypt and the nations of Western Asia, we will now turn to those elements in which she displayed a creative power of her own. The most interesting of these is the

Frieze representing a group of Persian dignitaries bearing presents to the king (reproduced in part). *Stairway of the Palace of Xerxes.* PERSEPOLIS.



column, which was not taken from the architecture of any other country. It is higher and more slender than the Egyptian column, and its proportions indicate that it originated in a wooden support.

The base of the column is bell-shaped and resembles a great inverted flower; indeed, it has no precedent in either Asiatic or Egyptian art. The shaft is striated, but the flutes are more numerous than on the Greek columns. It is surmounted by an original and elaborate complex consisting of a number of volutes combined with the fore parts of two fanciful bulls or unicorns which serve as brackets to support the joists of the roof. Between the necks of these creatures is left a space upon which the cross-beams rested. A glance at a photograph of a capital from Susa will give a better idea of this device than any description (figs. 197 and 202). It is easy to imagine the marvellous effect produced by a columned hall like that at Persepolis with its hundred lofty pillars surmounted by these unique capitals. The rows of parallel columns supported the beams and panels of the ceiling which were gilded and painted with a profusion of brilliant colors. The Oriental hangings and bright tiles would eclipse the color of the wall itself, interrupted at intervals by the delicate niches. These niches took the form of blind windows surmounted by the Egyptian gola and must have served as depositaries of the perfumes and ceremonial articles.

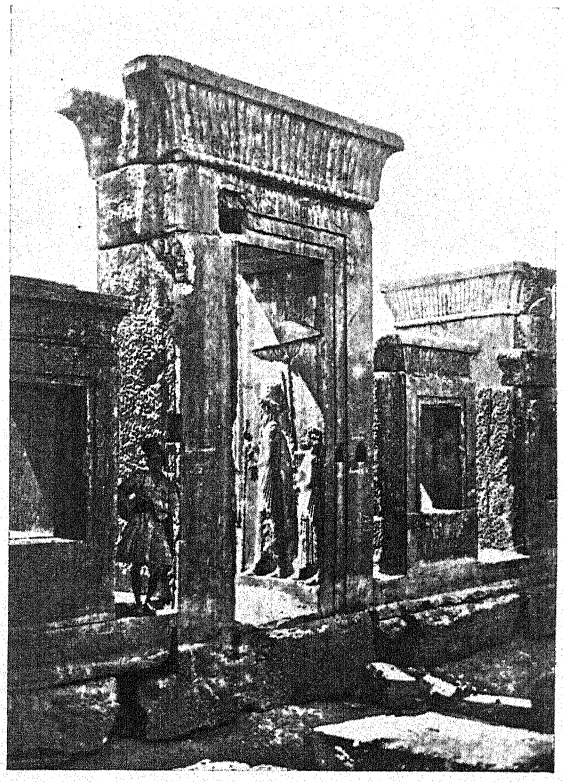


Fig. 196. — Doorway of the Palace of Darius surmounted by the Egyptian gola.

We have seen in the palaces of Persia a combination of the art of Egypt and Lydia with the structural features and terra-cotta material of Babylonia. Yet, in spite of all this, the Persians created a style all their own which was chiefly characterized by their manner of constructing the roof. We know this to have been of wood for no remains of stone lintels or architraves have been discovered among the ruins. It is believed that the bulls which formed part of the capitals were surmounted by a frame-work of beams, and the spaces left were filled with panels. On the façades the ends of the timbers and the edge of the

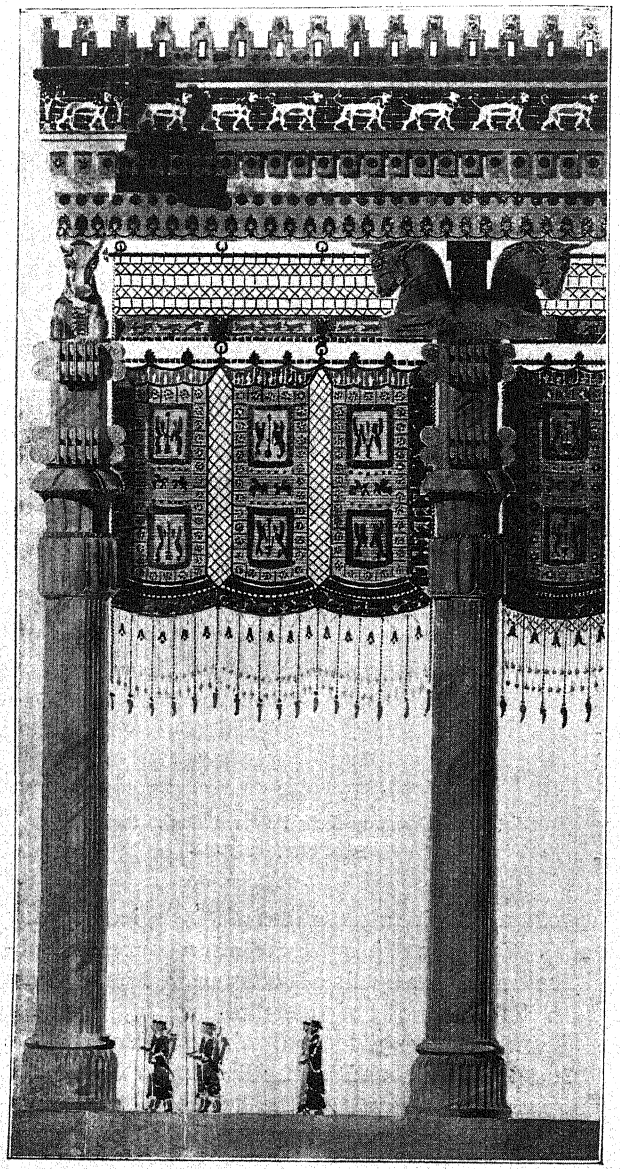


Fig. 197. — Restoration of the Persian column.

flat roof were covered with richly colored tiles. The restoration of the cornice can be based upon the profiles of the indentations which appear in the tops of the columns and the antae. We also learn much from the representations of palaces or buildings carved on the façades of the royal tombs.

The tombs constitute another architectural type adopted by the Persian kings which was entirely without precedent. Except for the Tomb of Cyrus at Pasargadae, the sovereigns were all buried in the royal necropolis at Naksh-i-Rustem about two miles from Persepolis, where the steep cliffs meet the plain in a semicircular curve (fig. 199). The face of the rock has been smoothed off to form the façade of each tomb carved in deep relief in honor of the monarch buried there. The lower portion of the façade is almost smooth, making a sort of base; above this is a broader band in which a royal palace is represented with its columned porch, and in the centre is the door leading into the burial chamber. Above this porch is a third field in which we see the king at prayer before the altar bearing the sacred fire worshipped by the entire people, for the king stands upon a high platform supported by a group of figures representing the various subject nations of Asia. Even today

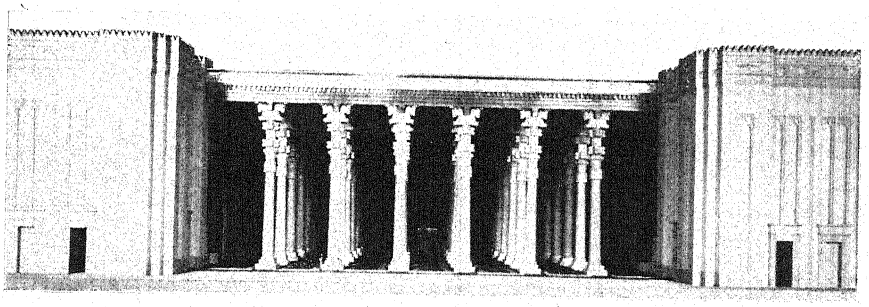


Fig. 198. — Hall of the palace at Susa, restored by Dieulafoy.

the royal throne of the Shahs of Persia rests upon a number of solid gold figures or atlantes. The piety and glory of the departed monarch is well represented on his tomb by his palace and the throne-platform supported by his conquered subjects.

The burial chamber within the cliff is very plain. In the floor are found a number of troughs cut from the rock to receive the bodies of the members of the royal family. Persian society had not lost its patriarchal character during the reign of the Achaemenid dynasty, and the king remained surrounded by his own family even in the tomb. The monarchs continued to cut out their tombs along side of one another in the same rocky hill down to the time of the conquest of Persia by Alexander. These sepulchres all follow the same type, one which was not borrowed from Assyria for the kings of Nineveh had no monumental tombs. Nor did the Persian kings imitate the tombs of the Pharaohs; the burial chambers of the Egyptians were skilfully hidden within a pyramid or in the heart of a

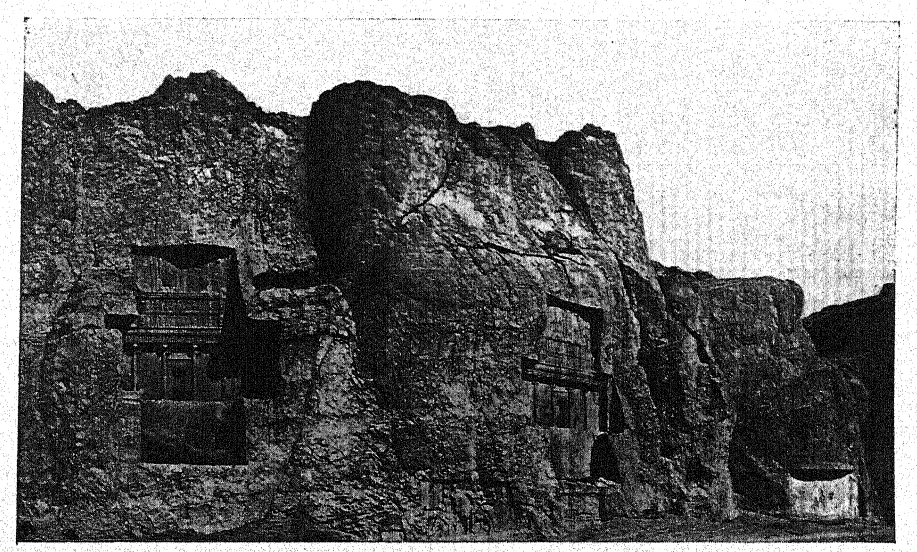


Fig. 199. — Royal tombs at Naksh-i-Rustem. *(Dieulafoy.)*

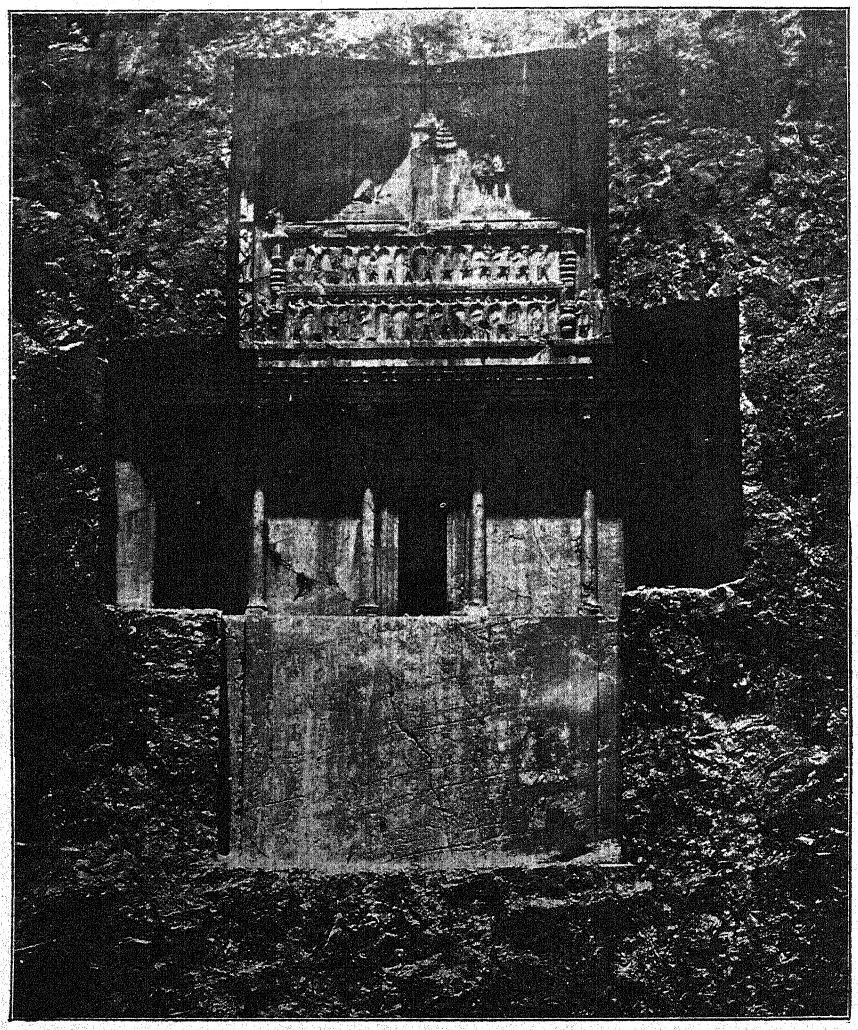


Fig. 200. — Tomb of Xerxes at Naksh-i-Rustem.

rocky hill. So we see that while Persia borrowed much from the other nations of the ancient world, at the same time she created an architecture of her own. The Persians were the first people in history to combine the finest achievements of their neighbors into a style and type which was expressive of their own national character.

In sculpture they imitated the types of Assyria and Babylonia. Persia has not furnished us with the great quantity of material which the palaces of Assyria have afforded. Also Persian construction was of a more solid nature; its principal parts were usually of stone, and it did not require to the same extent the stone casings carved in relief that were so indispensable in the Assyrian palaces composed of walls of sun-dried brick. On the other hand, the art of Persia was large-

Frieze of glazed tiles from Susa, called the Archers Frieze. *(Louvre.)*

ly confined to the commissions of the royal patrons and was of an aristocratic character, finer and more elegant than the Assyrian reliefs. The stone, too, was a fine limestone, and its close grain was more suitable for sculpture than the soft gypseous rock employed by the sculptors of Assyria.

We find Assyrian artistic types represented at Persepolis; especially noteworthy are the winged bulls of the propylaeum. These are executed with a purity of style and conventionalized with an elegance not possessed by the formidable monsters which guard the palaces at Nineveh.

The stairway leading to the platform at Persepolis is ornamented with a number of beautiful reliefs. There are lions and tigers and scenes in which the king battles with winged monsters (figure 201) or receives presents from his governors and vassals. (Plate XVII.) The especial predilection of the sculptors of Persia for idealized animal figures is also seen in the unicorns on the capitals of the columns, for to the Persian mind the unicorn was an idealized form. These figures offer a certain variety and do not all reproduce the same type.

Fig. 201. — Relief on the Palace of Darius at Persepolis. *(Dieulafoy.)*

Turning to painting, the first manifestation we find of this art is in the brilliant colors of the Persepolis reliefs, traces of which are still to be seen. But the feeling of the Persians for color is more amply displayed in their glazed tiles. The most interesting of these have been discovered at Susa, for here the *apadana* was built of brick. The Persian decorators covered the walls with great bands composed of large numbers of small tiles in which we see representations of animals or long files of warriors; the latter are probably the faithful Immortals who formed the imperial guard so renowned in the literature of Greece. (Plate XVIII.) They wear long tunics; each bears in his hand a spear and over his shoulder is slung his bow and quiver of arrows. The long rows of these remarkable soldiers form an imposing series of rigid figures more than six and a half feet high and beautifully executed in small glazed tiles.

The color scheme of the entire frieze is a harmonious combination of brown, yellow and greenish blue and we see in it a genuine production of the

Persian ceramists. It was an art which endured down to the end of the Middle Ages, for Persia was the only great Oriental nation of ancient times which remained beyond the radius of action of the Roman legions. The Roman Emperors were obliged to be content with the frontier established on the right bank of the Euphrates, while up in the highlands of Persia the Orient continued to develope its own types and traditional styles free from outside interference.

The Sassanid dynasties established subsequent to the dismemberment of Alexander's short-lived empire formed the connecting link between Arab and Byzantine art and that of the ancient nations of the Orient.

Summary. — The most important examples of Persian architecture are the royal palaces upon the terrace at Persepolis. Later, Persian palaces of the same type were constructed at Susa and Babylon. In all these edifices we find many features that were borrowed from the residences of the kings of Assyria. At the head of the stairway ascending the terrace at Persepolis we find a propylaeum flanked by winged bulls. The great pavilions used as reception halls were supported by lofty columns surmounted by a typical capital which was ornamented with the fore parts of two bulls or unicorns upon which rested the beams of the roof. Structures containing the royal apartments also contained a central hall with similar vertical supports, and at the sides and in the corners were rooms enclosed by walls. In these Persian buildings the doorways, columns and certain ornamental features resembling blind windows were carved from stone, and the remainder of the wall was filled in with brick and covered with glazed tiles. Persian art was of an eclectic character, for it took what it needed from the nations round about. Nevertheless, these borrowed features were merged and modified in such a manner that a national art distinctive of this nation was the result. The isolation of Persia from the Graeco-Roman world preserved its Oriental character which was handed down to the Arab culture of the Middle Ages together with many of its artistic traditions, the most noteworthy of which was the technique of the glazed tile.

Bibliography. — Flandin and Coste: *Perse ancienne: voyage en Perse,* 1840. — F. Stolze: *Persepolis,* 1882. — Sarre and Herzfeld: *Iranische Felsreliefs,* 1910. — Fr. Sarre: *Persische Denkmäler,* 1909. *Die Kunst des alten Persien,* 1922. — M. Dieulafoy: *L'art antique de la Perse,* 1885. *L'acropole de Suse,* 1890. — An excellent general survey is found in the fifth volume of *Histoire de l'Art dans l'antiquité,* by Perrot and Chipiez. — For an account of M. Dieulafoy's expedition see, *A Suse, Journal des fouilles,* 1888, by Mme. Dieulafoy.

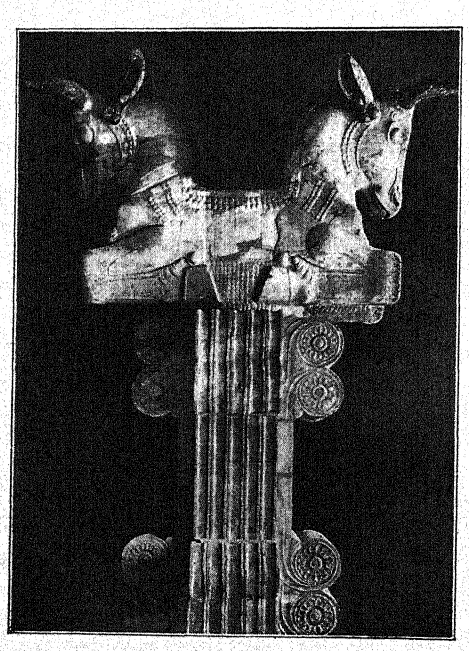


Fig. 202. — Persian capital from Susa. *(Louvre)*

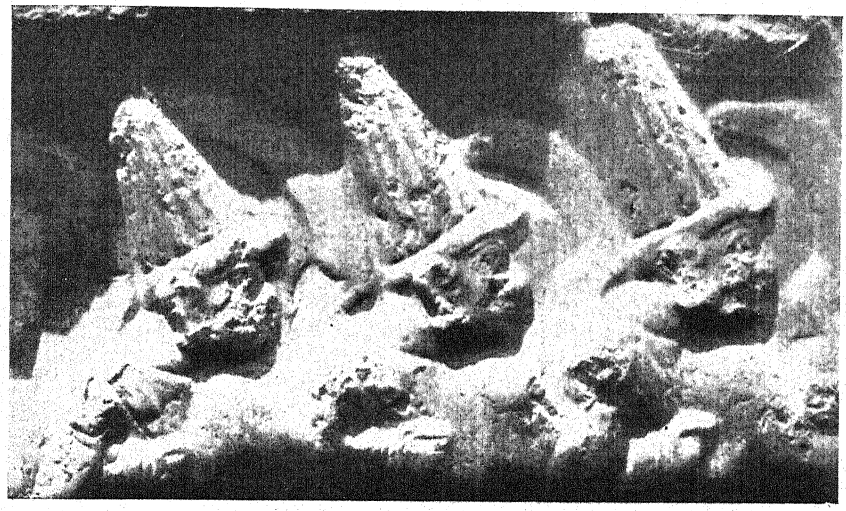


Fig. 203. — Hittite reliefs from Boghaz Keui.

CHAPTER IX

THE SPREAD OF ORIENTAL ART. — THE HITTITES. — PHOENICIA AND CYPRUS. — PALESTINE. THE MEDITERRANEAN COLONIES OF THE NATIONS OF WESTERN ASIA. — IBERIAN ART.

AROUND the edges of Western Asia extended a series of lesser countries, a crescent of semi-independent provinces, we might say, bordering upon the nucleus of the great empires of the Orient. In the history of each of these nations there was a period of artistic activity, and each had its part in the development of the various ideas which originated in the Orient. The most ancient of these was the formidable kingdom of the Hittites. The Egyptians called them the Khatti, and they frequently appear on the monuments at Karnak and Nineveh. Their home was among the high mountains of northern Syria over toward the Black Sea, and from this vantage-ground they often swept down and checked the advance of the Pharaohs in the west and later the Assyrians in the high valleys of the upper Euphrates. The political importance of this nation was already on the wane when the later Hebrew prophets were writing the postexilic books of the Old Testament, so, as with other nations of whom the Bible tells us little, it has been necessary to reconstruct their history from the Assyrian clay tablets and the monuments

Fig. 204. — Hittite relief.

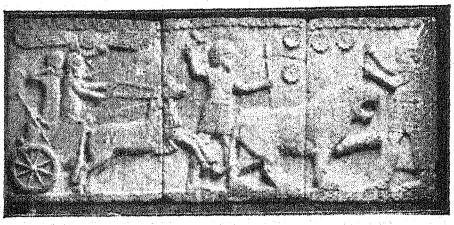


Fig. 205. – Hittite relief from Sakhchegozu. *(Puchstein.)*

at Nineveh. It is only in recent years that Boghaz Keui, the capital of the Hittite state, has been discovered, and the excavation of the buildings on this site has brought to light a quantity of diplomatic tablets written in the Assyrian cuneiform characters, the official writing of the Orient for communications from one government to another. Moreover, the Hittites also possessed a hieroglyphic writing of their own which has not yet been deciphered. Their language seems to be Indo-European.

But the sculptures of these peoples covered with mysterious inscriptions, are of especial value to the student, for they reflect the great art of the reliefs of the palaces of Mesopotamia. The Museum of Constantinople possesses a lion which was one of the decorations from Carchemish. Although this sculpture is plainly an adaptation of the Babylonian bulls, it is not lacking in expression; indeed, it might be the product of a new and original school. The same is everywhere true of Hittite art so far as we can learn; personal and expressive of this mountain nation as it is, it is an imitation of the art of the flat bottom-lands of the Tigris and Euphrates. In art as in history, the Hittites formed the barrier which prevented the spread of Assyrian influence to the Black Sea and over the east of Asia Minor.

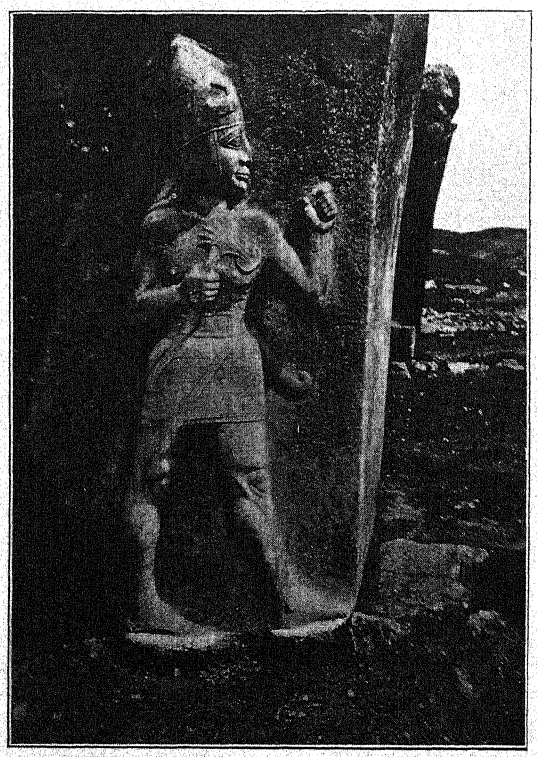
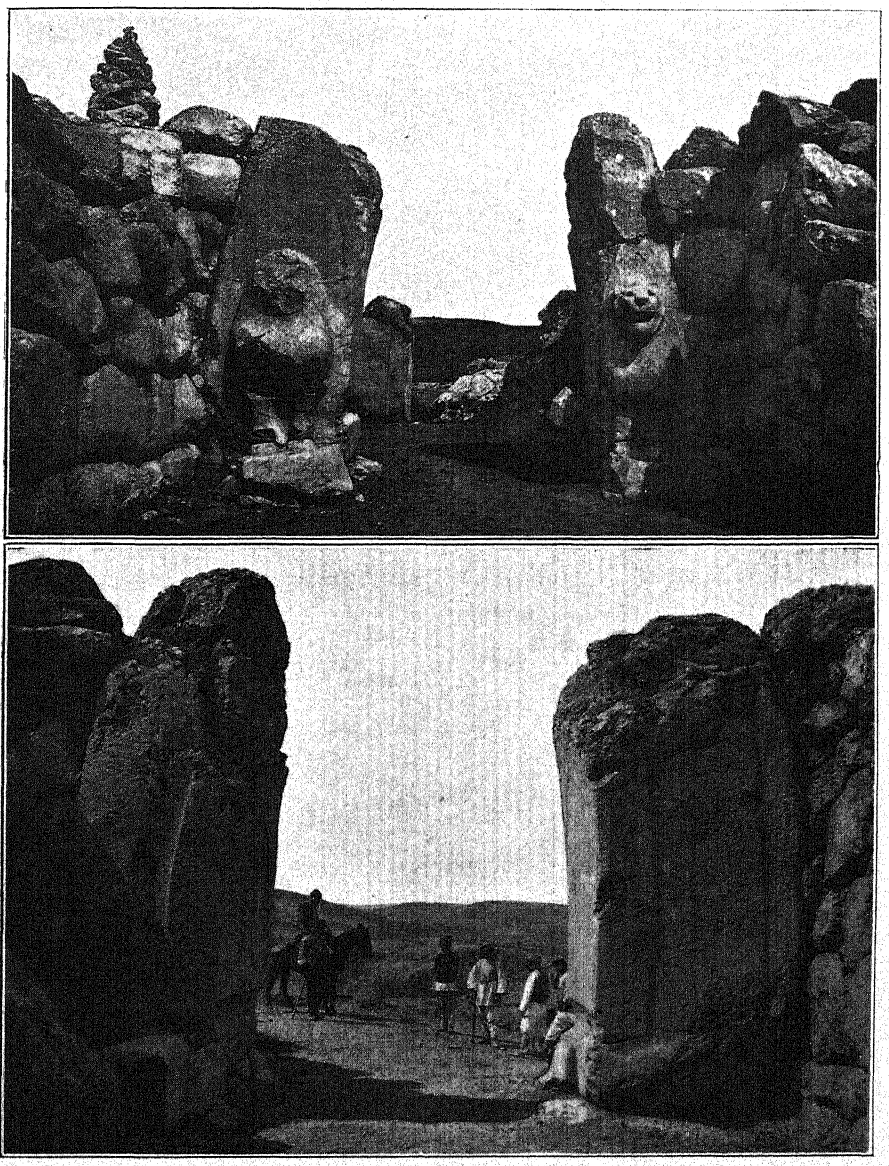


Fig. 206. — Relief on a doorway. Boghaz Keui.

The best known of these Hittite reliefs are the sculptured rock walls of the open temple near Boghaz Keui, their ancient capital, which have long been studied by archaelogists (fig. 203). A narrow gap in the mountains is reached by a rocky defile, and in this strange natural amphitheatre are still to be seen rows of figures wearing a peculiar sort of hood, a sabre in one hand and in the other a cup, the symbol of a forgotten cult. We know that a sacred wine played an important part in the religion of the Hittites. In other reliefs



Palace gates at Boghaz-Keui. *(Puchstein.)*

appear Hittite warriors and priests bearing the mystical two-edged axe venerated by so many ancient peoples (figs. 204 and 206).

Some of these reliefs were purely decorative and represent hunting scenes like those on the palaces of Assyria (fig. 205), but the execution is crude. Hittite sculptures never achieved the purity of those of Nineveh.

Fig. 207. — Base of a column in the gateway of a Hittite palace at Sendschirli.

Nevertheless, the Hittite nation also enjoyed a wide-spread reputation at one time, and we should not be surprised when we find their name inscribed among those of the great nations of the ancient world. There was a spasmodic activity in the archeological exploration of the highlands of northern Syria during the years immediately preceding 1914, and its most important result has been the monumental work published by Puchstein, the secretary of the German Archaelogical Institute, covering the exploration of the royal palace at Boghaz Keui. Here they found several enormous buildings surrounded by polygonal enclosures, the outer one constructed of rough stone. The inner wall was built of hewn blocks and equipped with battlemented towers. A very interesting feature is the gateway of the outer wall which opens into a long corridor, or subterranean sally-port. This gate is ornamented with rude sphinxlike figures and was covered with a parabolic archway of cut stone. Here a regular stone construction takes the place of the brick vaults of the plains of Babylonia and Assyria. (Plate XIX.)

An expedition sent out by the University of Liverpool in 1909 and headed by Professor Garstang discovered another palace at Sakhchegozu. The most striking feature of this structure is also the gateway; here it is divided in the centre by a column as in the European cathedrals of the Middle Ages. This column rested upon an unusual base composed of two sphinxes (fig. 207).

The kingdoms of Lycia and Phrygia were really Oriental nations, but they came into closer contact with the Greek element of Asia Minor than most of the other peoples of Western Asia. They were subject to Assyria, but their Hellenic affiliations were the vehicle by which a number of the myths, legends and traditions of the Orient passed over to Greece. Lycian and Phrygian architecture is interesting, for it imitated in stone the earlier wood construction of those countries, even going so far as to preserve the mortised joints of the timbers. The structures that have come down

Fig. 208. — Coin representing the Phoenician temple at Byblus.

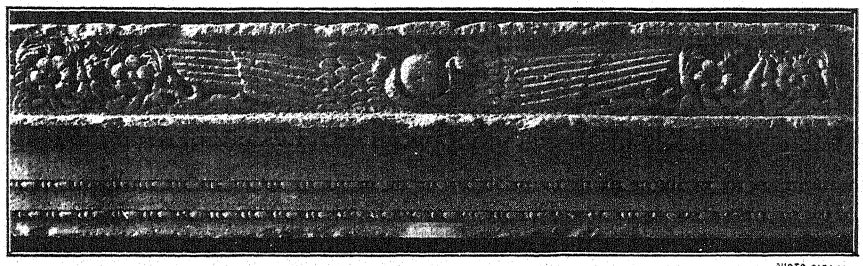


Fig. 209. – Lintel from the temple at Byblus. *(Louvre.)*

to us are usually funerary chapels, and it is evident that they exercised an important influence upon Greek architecture, for the Ionic Order appears to be derived from these lighter forms. (Plate XX.)

Lycian and Phrygian art ran more to articles of luxury, however. The kingdoms of Midas and Croesus were proverbial in ancient times for their wealth, luxury and refinement. In the vase-paintings of Greece these peoples are always represented as richly dressed. But they were frontier countries and were so frequently laid waste that little remains of their architecture except a few scattered tombs.

Having made a brief survey of the more northern peoples of Western Asia who were affected by Oriental art, we will now touch lightly upon the maritime nations along the Mediterranean coast. From the slopes of Lebanon to the seashore there was not much room for expansion, so the Phoenicians found in their colonial enterprises a field for wide-spread activity which was not afforded by the restricted area of their own country. This nation has been likened to modern England, for its colonies extended to the end of the known world. Perhaps it would be more in keeping with the actual facts to compare the Phoenicians with the Jews of the Middle Ages. As a nation, they acquired little territory, and their activity was largely as individuals. Their credit system kept them in close touch with one another; they were the bankers and exporters of the ancient world. They conducted expeditions to the most distant lands and were an important factor in every maritime war. Many of them were born in distant Mediterranean colonies or even on the far-off Atlantic coast, but a close racial cohesion was always maintained by means of their commercial relations with one another.

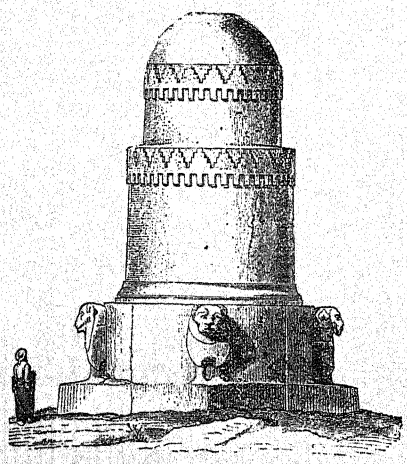


Fig. 210.—Tomb at Amrit, or Marathus *(Renan)*.

The national sanctuary of the Phoenicians was the temple at Jebeil, or Byblus; here, too, came the idolatrous princes of Judea. Little remains of this

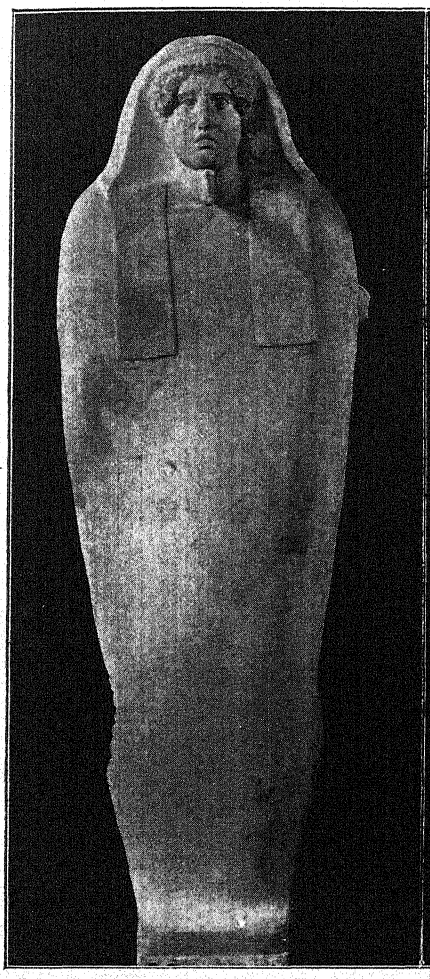


Fig. 211. — Anthropomorphic sarcophagus.
(Museum of Constantinople.)

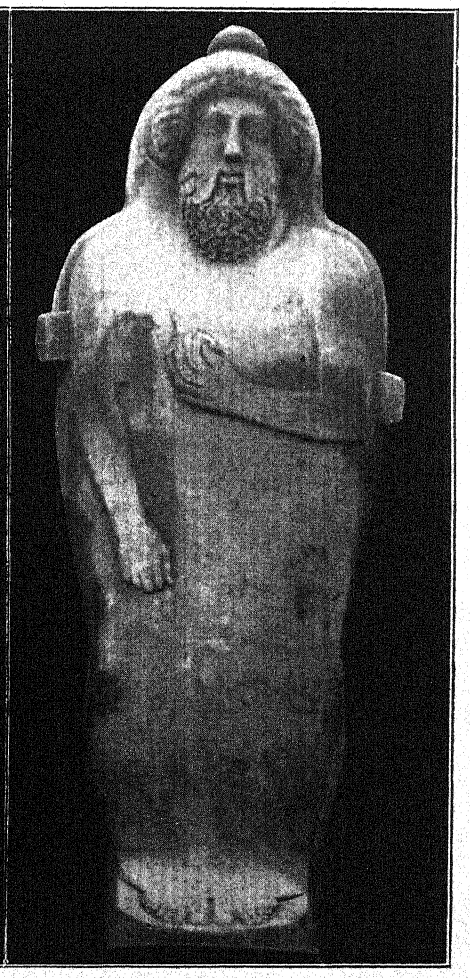


Fig. 212. — Phoenician sarcophagus.
(Museum of Cadiz.)

ancient structure; the Louvre possesses only a lintel from one of its doorways bearing the winged sphere, an Egyptian symbol (fig. 209). It is evident that the Phoenicians imitated the architectural styles of the people with whom they traded. We see from the representation of the temple at Byblus upon a coin that in addition to the *cella* with its altar, there was a court, or open sanctuary, in front of which was a columned portico. In the centre of this court was the cone-shaped *baetylus*, or aerolite, which so often served as an idol among the nations of the Orient (fig. 208).

The first capital of the country was Sidon, which was destroyed by the Philistines (a warlike people who are now supposed to have migrated from Crete to southern Palestine), and Tyre with its favorable situation became the seat of

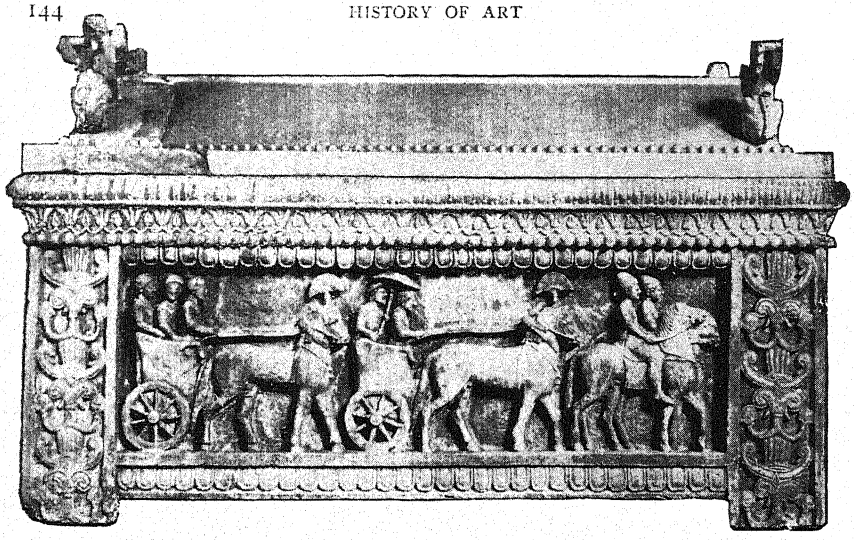
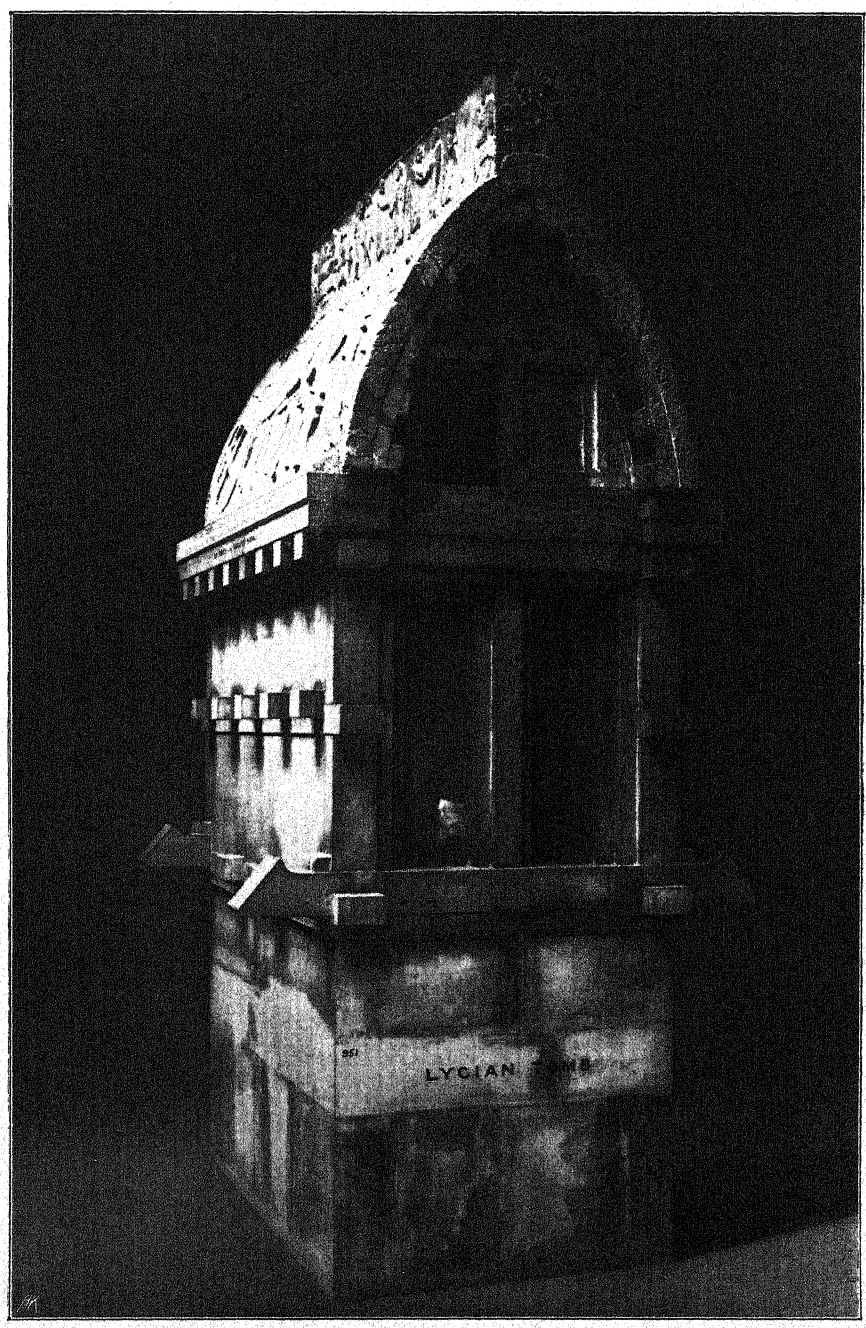


Fig. 213. — Phoenician sarcophagus from Cyprus. *(Museum of New York.)*

government of the kings of Phoenicia. Like Venice, this city was set upon an island and protected from invasion by an arm of the sea. To effect its capture even the invincible army of Alexander was obliged to fill in the canal and construct a causeway which still exists. On this former island the famous city gates are hardly recognizable. The land purchased at fabulous prices by wealthy bankers returning from the colonies is now occupied by a few poverty-stricken fishermen Ezekiel's prophecy regarding Tyre is surely fulfilled! "I will make her a bare rock, she shall be a place for the spreading of nets in the midst of the sea." Renan, who headed the French archaeological expedition to this site, remarked: "I doubt if there was ever a city which played so important a part in the world as Tyre, of which so little remains." Nevertheless, Renan's expedition made some excavations, and a number of genuine Phoenician funerary monuments were uncovered. They are monolithic tombs cut from the native rock and stand out from the surrounding landscape (fig. 210).

Fig. 214. — Phoenician capital. Cyprus.

Other burial chambers below the ground were found to contain the famous sarcophagi shaped like a human form, and similar ones have been since discovered in all the Phoenician colonies, even at far-off Cadiz (fig. 212). They appear to have been derived from the Egyptian sarcophagi, for the human figure which forms the cover is often a portrait of the deceased. Many of these



Lycian tomb, counterfeiting wooden construction *(British Museum.)*

have been found in Sicily and at Carthage. The most beautiful of the Carthaginian sarcophagi are those of the priests and priestesses of Tanit. The function of the Phoenicians in ancient art was not so much the creation of new types as it was to apply and spread the artistic inventions of Egypt and Assyria. Their fondness for imitating and even counterfeiting generally accepted Oriental forms makes it difficult to ascertain just to what extent the Phoenician nation contributed to the progress of art. Their imitations have been found together with originals known to be authentic, which were doubtless mixed in to improve the quality of a consignment of articles for exportation.

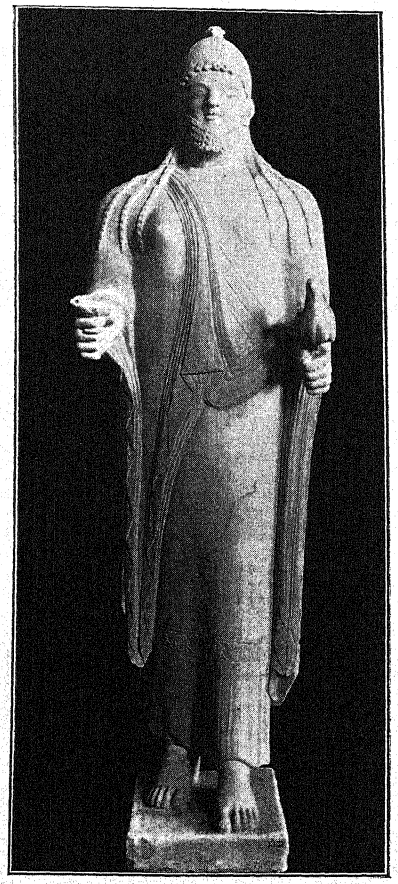


Fig. 215. — Phoenician priest. Sculpture from Cyprus. *(Cesnola.)*

Except for the Tyrian monuments already mentioned, only an occasional wall remains to mark the Phoenician domination in the colonies. In Sicily Salinas identified the walls of the acropolis at Cefalu as Phoenician, and it is well known that the southern corner of the Island of Sicily was a commercial base of this people.

Cyprus was another of the colonies of Tyre, and its temple at Paphos was dedicated to the Phoenician Astarte. This building, as represented upon coins, seems to have resembled somewhat the earlier Greek temples, but its site has not yet been identified with any certainty. The Egyptians exercised dominion of a sort over Cyprus, and the island was later conquered by the Assyrians. A stela commemorating the reign of Sargon has been discovered there, and the influence of both Egyptian and Assyrian art can be recognized in nearly all the objects found in Cyprus.

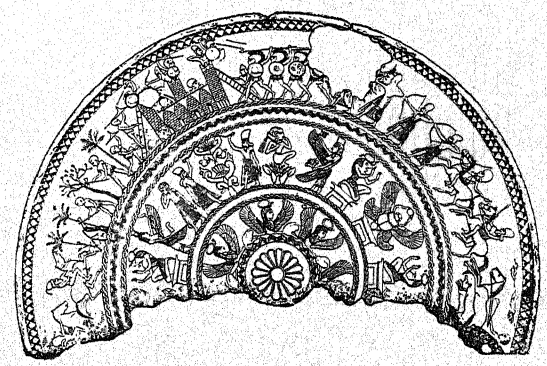


Fig. 216. — Silver cup in imitation of the Egyptian style. Cyprus

The same is true everywhere of Phoenician

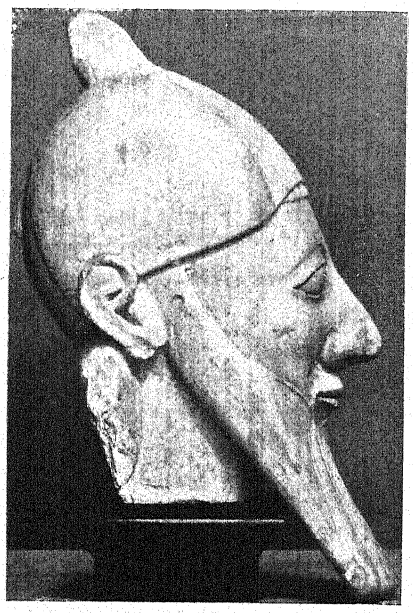


Fig. 217. — A Cypriote merchant.
(New York Museum.)

art; although the types and forms are of the Orient, we are constantly reminded of Egypt. But it is in Cyprus that this mixture is of especial importance to the student of art, for this island lay within the radius of action of the Greeks. Here, as in Lycia, the Greeks learned to know the exotic forms which they afterward assimilated and reproduced with the delicate sense of beauty so characteristic of this people. An excellent example of this is the voluted capital which is unquestionably of Oriental origin and which later became so characteristic of one of the Greek architectural styles. We find the volute used as a decorative form in the reliefs of Assyria and in the furniture of various parts of the Orient. The same spiral form appears on the sarcophagi of Cyprus (fig. 213), and Cesnola has even found a capital ornamented in the same manner (fig. 214). The fragment of another Phoenician capital ornamented with volutes and palmettes has been discovered in one of the old Phoenician cities of Sicily.

Fig. 218. — Canaanean sanctuary, or "high place", at Gezer.

It is interesting to find the same combination of types in sculpture; although the statues of Cyprus remind us of those of Egypt and the Orient, still they possess a certain local flavor. They are usually of unpolished limestone. One of them which represents a priest of their goddess with a dove in his hand is characteristic of this people (fig. 215).

In the minor arts the Phoenicians displayed little originality. Cesnola dis-

covered a silver cup in Cyprus ornamented with engraved winged figures of the Egyptian type (fig. 216). On their pottery we find geometrical designs which reveal a certain artistic feeling which spread to the western Mediterranean peoples. The decoration of this pottery consists of combinations of lines forming zones, triangles and square compartments resembling metopes.

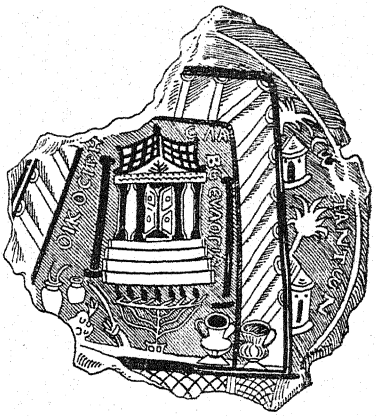


Fig. 219. — Roman glass decorated with a view of the temple at Jerusalem including the two bronze columns, the sacred vessels and the candlestick. *(Museum of Vienna.)*

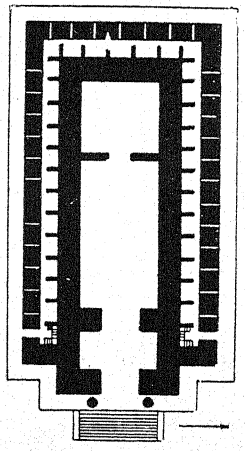


Fig. 220. — Plan of the Holy of Holies in the temple at Jerusalem.

Of absorbing interest is the art of another country not far from those we have been discussing. This is Palestine, or the Land of Canaan, so long the home of the Chosen People. For a number of years the archaeological exploration of this country, which extended from the River Jordan to the sea, has been carried on by professional archaeologists and by the representatives of the various Biblical societies. As yet we know little of the people who occupied this country prior to the Hebrew conquest. The mud walls surrounding their cities have been laid bare by the excavations at Jericho, Megiddo and Gezer. Especially interesting are the remains of their sanctuaries, or "high places", to which the people continued to repair and where they sacrificed to their idols in spite of the laws forbidding this practice. These Canaanean sanctuaries consist of a rectangular enclosure containing an altar in the center surrounded by a number of pillars, or baetyli, which were closely related to their cult (fig. 218).

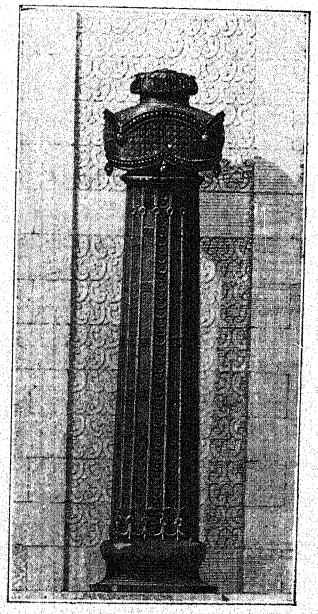


Fig. 221. — Bronze column in the temple at Jerusalem. *(Chipiez.)*

The Old Testament contains frequent references to the destruction of these shrines by orthodox worshippers in times of religious revival when the statutes of Jehovah were strictly enforced. Soon, however, the populace, ever prone to idolatry, would again assemble at the "high places" where the sacred stones were adored and human sacrifices performed. Indeed,

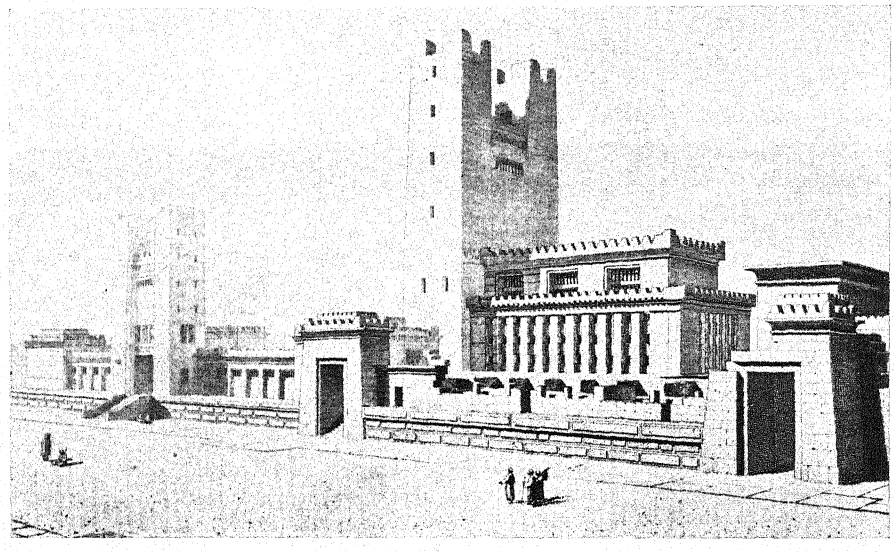


Fig. 222. — The temple at Jerusalem as seen from the outer court. *(Restoration by Chipiez.)*

one of these sanctuaries was in the environs of Jerusalem itself just beyond the brook of Kedron.

In Jerusalem as at Tyre, the prophecies have been fulfilled to the letter, and not one stone of the great palaces or the temple constructed by the artists and artisans of Phoenicia remains upon another. When the Israelites fled from Egypt they already knew the art of casting metals and were capable of making the golden calf and constructing unaided the Ark of the Covenant. They also wove the textiles for their tabernacle. But after they had turned to agriculture they forgot the arts they had learned in Egypt, and when the great works of the period of the kings were proposed, it became necessary to call upon the Phoenician king of Tyre for assistance. "And Solomon sent to Hiram the king of Tyre, saying: As thou didst deal with David my father, and didst sent him cedars to build him an house to dwell therein, even so deal with me. Behold I build an house to the name of the Lord my God, to dedicate it to him." Solomon asked Hiram for carpenters, "For thou knowest that there is not among us any that can skill to hew timber like unto the Sidonians." The cut stone brought to Jerusalem had been worked by the subjects of Hiram, and at last the Phoenician king supplied even a superintendent for the work. Of this other Hiram we read: "He was a widow's son of the tribe of Naphtali, and his father was a man of Tyre, a worker in brass: and he was filled with wisdom, and understanding, and cunning to work all works in brass." This metal-worker, said by the Phoenician king to be noted for his art as was his father before him, was skilful in working gold, silver, marble and wood, and he was also a connoisseur of purple and fine linen. In the Books of First Kings and Second Chronicles we find a detailed account of the construction of the temple, but for all the patriotic enthusiasm of the narrators, constant reference to the part taken by the Phoenician artisans

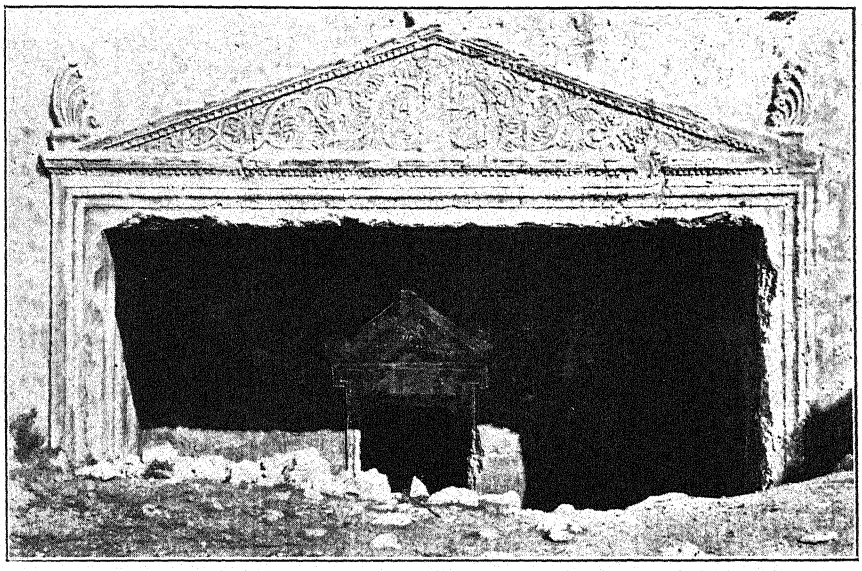


Fig. 223. — The so-called Tomb of the Judges. JERUSALEM.

could hardly be avoided. Timbers were brought by sea from Lebanon to Jaffa by the allies of Solomon, and from here they were transported to Jerusalem. A suitable place for a foundry was sought, and "In the plain of Jordan did the king cast them, in the clay ground between Succoth and Zeredatha", a concrete illustration of the installation of an industry known to almost all the nations of antiquity.

Here were cast the vessels and metal fixtures for the temple, especially the two famous bronze columns which were set at either side of the door of the sanctuary. The account goes on to say, "and he made a molten sea, ten cubits from the one brim to the other". This was an enormous vessel for the water used in connection with the temple services. It was supported by twelve lions which were also of cast metal, and it occupied the centre of the court in front of the sanctuary. Here the sacrifices were offered and the water required by the priests was brought in smaller quan-

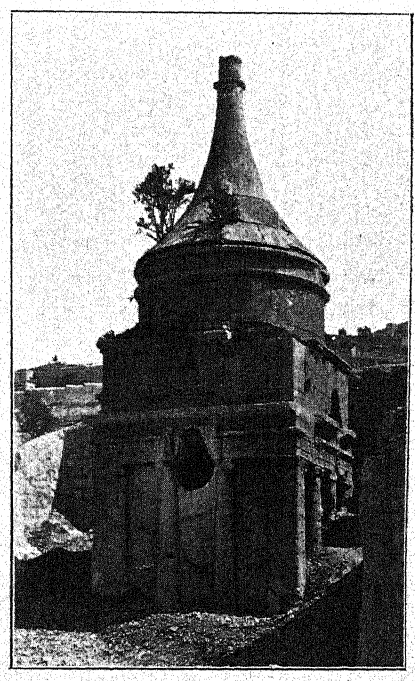


Fig. 224. — So-called Tomb of Absalom. JERUSALEM.

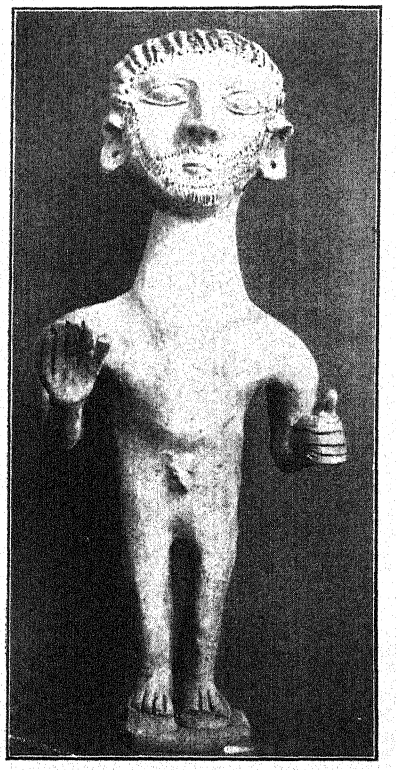


Fig. 225. — Terra-cotta male figure. Necropolis in Iviza. *(Vives Collection.)*

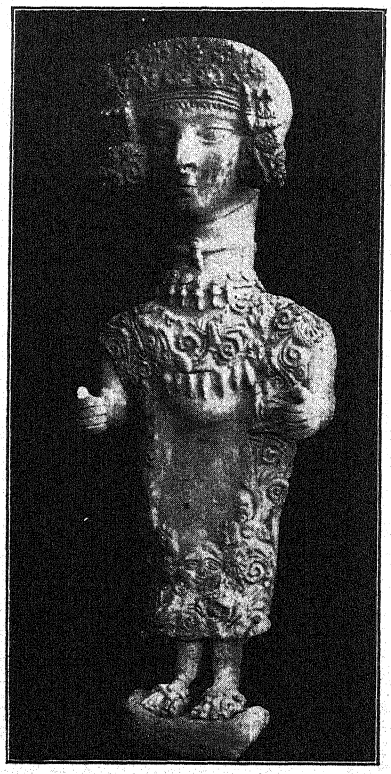


Fig. 226. — Terra-cotta female figure. Necropolis in Iviza. *(Vives Collection.)*

tities in receptacles borne by upright supports and set upon wheeled carts. In the first court took place most of the ceremonies; as in the temple at Jabeil, or Byblus, the temple at Jerusalem was primarily an open one. But instead of the stone fallen from heaven, the Jews had the tablets of the laws of Moses which were set within the Ark and enclosed in the most holy place. This last was a stone chapel, or naos, roofed with timbers and entirely covered with gold within. On either side were the corridors which lodged the priests, lighted by windows from the outside, but the sanctuary itself was completely enclosed, and only the light from the doorway was admitted (fig. 220). As has already been noted, the same was true of the temples at Assur, and the sanctuaries of the Egyptian temples were likewise very dimly lighted. A representation of the two bronze columns at the entrance to the holy place has been found upon a piece of gilded glass discovered in the catacombs at Rome and now in the Museum of Vienna. The temple itself is also shown (fig. 219). These columns were undoubtedly symbols of the attributes of God, for they bore the names Jachin and Boaz, which mean: "He shall establish" and "In it is strength". Oriental nations who were not permitted to make plastic representations of their gods often worshipped a pillar, and in the "high places" of Judea we see sacred

Phoenician funerary mask from the necropolis of Iviza. *(Museum of Cau Ferrat.)* SITGES.

pillars of this sort which were more than symbols. We find in the Old Testament a detailed description of these bronze columns ornamented with pomegranates, and upon this account is based the restoration of M. Chipiez (fig. 221). To a great extent the work of Phoenician craftsmen, the Jewish temple doubtless combined many of the artistic features of both Egypt and the Orient. Built of stone and covered with a flat roof of Lebanon cedar, the structure was utterly unlike the vaulted brick buildings of Assyria. The ornamentation, however, seems to have resembled somewhat that found at Nineveh. For example, the two doors were of olive wood and carved to represent cherubim, palms and flowers; the cherubim and palms were plated with gold. These cherubim were winged beings with human heads and were represented on every portion of the sanctuary. "And he carved all the walls of the house round about with carved figures of cherubim and palm trees and open flowers, within and without." The ceiling was of cedar panels.

Fig. 227. — Carthaginian terra-cotta figurine. Iviza.

Fig. 228. — Carthaginian terra-cotta plaque. Iviza.

The temple was destroyed by the Babylonians and rebuilt by Ezekiel after the return from the Babylonian captivity, following the original plan so far as possible. Restored by the Maccabees and enriched and enlarged by Herod, it endured until it was completely destroyed by Titus, who used the stone blocks to erect a Roman temple in honor of Jupiter. Later, Constantine and Justinian covered the hill upon which it stood with religious edifices, and today the handsome mosques of Omar and el Aksa occupy the site together with a large number of smaller buildings. The esplanade of the ancient Jewish temple still preserves its imposing appearance; few spots in this world are more suggestive of the past than the terrace of this sacred hill upon which one cult has succeeded another since the earliest days of mankind. Except for the years

Fig. 229.— Carthaginian terra-cotta mask. *(Vives Collection.)*

of the Captivity when the Babylonians kept a garrison there, it never lost its sacred character. From the broad terrace paved with white marble at the summit of this hill can be seen the city of Jerusalem covering Mount Zion and white as the terrace itself. In ancient times the valley between the hill of the temple and that of the city was crossed by two bridges beneath which lay the goldsmiths' quarter.

The retaining walls of the temple terrace were built of rectangular stone blocks and here the Jews still assemble to mourn the fate of their city. The walls themselves have a Roman appearance; they probably date from Herod's time and were a part of the great building program by which the Tetrarch sought to win the favor of the Jewish people. He constructed a number of subsidiary buildings, and the outer enclosure, the Court of the Gentiles, is known to be his work. With all its additions and embellishments accumulated through the centuries, the great structure consisted of three concentric courts, or enclosures. The outer one, the Court of the Gentiles, was an immense caravansary where pilgrims and merchants assembled from everywhere when they came to the city for the Passover. Here were lodged the beggars and nomads who wandered about Palestine. It was a great open market filled with shops and booths and swarming with foreigners from every part of the Orient. The second court was called the Court of Israel. This, too, was surrounded by walls, and its gateways were in line with those of the outer court. It was reserved exclusively for the Jews; here they bought and sold animals destined for sacrifice and assembled to discuss politics and other matters of general interest (fig. 222). The third enclosure, or Court of the Priests, occupied the site of Solomon's temple and here was the Naos, or "house" which contained the Ark down to the time of the Captivity. In this inner court was the "molten sea" of bronze, and in the storerooms attached to it were the rich

Fig. 230. Terra-cotta bust. IVIZA.

treasures of the Jewish temple. Captured as trophies in the time of Titus, the sacred vessels, the trumpets of the priests and the seven-branched candlestick, the entire temple service in fact, were carried off and placed in one of the temples at Rome. Centuries later the Vandals seized this treasure and with the consent of the Emperor loaded it into a ship and took it to their African provinces. This is the last we hear of it; but who knows? We may some day find in the tomb of a barbarian chieftain of Tunis or Algiers these vessels cast by Hiram, carried off to Babylon and restored in the time of Ezekiel, taken to Rome by Titus and again plundered by Vandals from Africa. There is a tradition that Belisarius rescued the vessels when he conquered Northern Africa and brought them to Constantinople, where they were destroyed when the city was sacked by the Crusaders.

Fig. 231. — Statue of an Iberian priestess from Cerro de los Santos. *(Archaeological Museum of Madrid.)*

Such were the vicissitudes of the Temple of Solomon. Its original nucleus was the work of Phoenician artisans, but its associations have caused it to inspire an intense and wide-spread curiosity. Except for this building, there were no truly monumental structures in Palestine. The Jewish nation, which through its literature occupied so prominent a position in the Orient, possessed no aptitude for plastic art. The royal palaces of David and Solomon, also the work of the Phoenicians, have disappeared, and the descriptions we have of them are not sufficiently detailed to give us much of an idea of their character. There are, however, near Jerusalem a number of

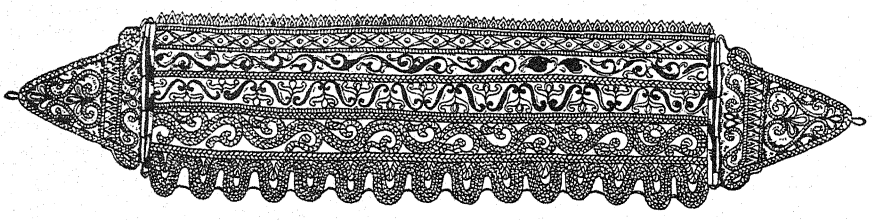


Fig. 232. — Iberian diadem of gold found at Javea. *(Archaeological Museum of Madrid.)*

hypogea which evidently date from the Hellenic and Roman periods, although tradition names them as the tombs of kings and prophets (figs. 223 and 224). They are mentioned here only because of the surroundings in which they are found, for their style is undoubtedly that of the Oriental school of classic art.

The Hellenization of Palestine under the Syrian kings of Antioch and Seleucia may be said to have been almost complete. Many of the high priests had Greek names, and the revolt of the Maccabees was a reaction of the more conservative Jewish element. Yet, even the Maccabees themselves were buried in tombs which, so far as we can learn from the descriptions, were strongly reminiscent of classic art. The sepulchre of Judas Maccabaeus and his brothers was surrounded by rostral columns and military trophies like those of the more elaborate Roman tombs.

Following the artistic expansion of the Orient, we will consider the Occidental colonies of the nations of Western Asia on the north coast of Africa. Carthage was the connecting link between Spain and the Orient. Later when the exploration of the known world was more completely realized, the Carthaginians found that the old Phoenician system of monopolizing trade and establishing a sort of commercial tutelage over their customers no longer served their purpose. The more powerful nations were preparing to partition the world to obtain markets, and Carthage was compelled to conquer and colonize in order to sell her goods: hence her colonial adventures in Sicily, Sardinia and Spain, which awakened the envy of the Romans and became the cause of her ruin. The destruction of Carthage was almost as complete as was that of Tyre. Its cemeteries have been excavated by the White Fathers, whose monastery near Tunis is on the site occupied by the ancient capital. These explorations were directed by that unassuming scientist, Father Delatre, and have brought to light a large number of objects which give us some idea of Punic, or Carthaginian, art. Certainly the most beautiful of these are the figures on the covers of the sarcophagi of the high priests and priestesses of Tanit, the patron deity of Carthage. In the same tombs were found many stelae covered with sculptures and inscriptions and vases of both pottery and bronze, great quantities of which had been brought from Greece. Their architecture also seems to have been largely derived from the Greek types. Phoenician art, which in Tyre was Oriental and Egyptian in character, ran to Greek forms at Carthage. The Berber tribes of Northern Africa with whom the Carthaginians were so long in constant conflict had no artistic culture of their own. A few mausoleums of these African tribes still remain; their inscriptions are in the script peculiar to these people.

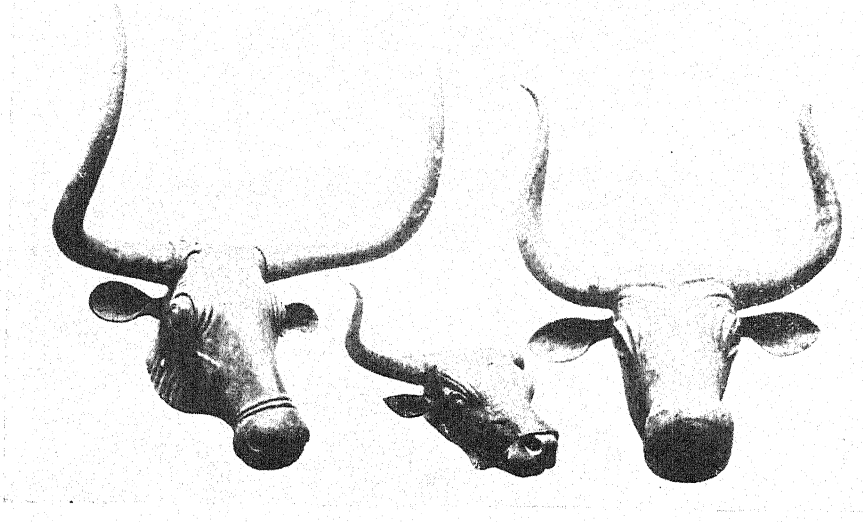


Fig. 233.— Bulls' heads of bronze found at Costig. MALLORCA. *(Pierre Paris.)*

About the only Punic remains of the old city which survived until our own time were the ruins of the monumental stairway which led from the port to the temple of Tanit. Except for this, such remains as still exist, the ruins of the docks and acqueducts, are the work of the Romans who rebuilt the city. The complete disappearance of the monuments of the Punic city makes it almost impossible to formulate any tenable hypothesis regarding the precise nature of its architecture. The same was formerly true of its sculpture; forty years ago hardly a Punic statue had come down to us. Today, however, the sarcophagi and terra-cotta figurines give us some idea of the mixture of types and styles that prevailed at ancient Carthage. The forms are Greek, but their interpretation as well as the faces of the figures are completely Semitic in character, just as they are in Cyprus. A splendid collection of Punic sculptures was discovered about ten years ago in the old Carthaginian cemetery in Iviza, one of the Baleric Isles. The Pityusae (the ancient name for the islands of Iviza and Formentera) formed an important naval base which Carthage had inherited from the Phoenicians, and the rock tombs of these islands have yielded great quantities of small statues, bronzes, coins and glassware. In the six figures from Iviza reproduced in our text we see that while some are almost Greek types, others retain features characteristic of the art of the Semitic peoples (figs. 225 to 230).

Another Carthaginian settlement has been explored with considerable success at Herrerias in the Province of Almeria, Spain, where the Phoenicians exploited the silver mines at a very early period; this was the richest colony Carthage possessed, and, as is to be expected, new material for the study of Phoenician art is constantly being discovered. The famous Phoenician temple of Hercules at Cadiz is still to be explored; it lies beneath the waters of the bay.

Fig. 234. — Carving from Balazote. *(Archaeological Museum of Madrid.)*

This temple, that at Byblus in the Orient and the temple of Tanit at Carthage were undoubtedly the three principal religious centres of the Phoenician people.

This intrusive Phoenician culture took such firm hold in Spain that later, when the peninsula had come within the sphere of Greek influence, Iberian art always preserved a wealth of Oriental forms. Most of the Iberian sculptures that have come down to us were discovered about fifty years ago in the remains of a small temple or chapel near Yecla in the Province of Almeria. The hill upon which it stood was known as the Cerro de los Santos, and a rich collection of sculptures, probably votive offerings, were acquired by the National Archaeological Museum at Madrid. Strangely enough, there is not a single full-length male figure; only smooth shaven heads with a cap of some sort fastened to the skull. The figure was probably nude, but the women were dressed in a broad tunic which hung in folds and a large mantel which reached the ground (fig. 231). Some of the latter wear a mitre, necklaces with pendants, diadems and large gold wheels on either side of the face. The diadem from Javea is of Greek design although the workmanship appears to be Iberian (fig. 232). Other specimens of Iberian jewelry have recently been discovered, the most important of which is one of these gold wheels which were worn on either side of the head. It may be that some Ionian female figure like those found on the Acropolis at Athens was carried to Spain where it was freely imitated by the artists of that country. The female figures found on the Cerro de los Santos seem to represent priestesses, for they bear in their hands a cup, or chalice, resembling the Iberian pottery vases.

By far the finest example existing of Iberian sculpture is the so-called Lady of Elche, discovered in that city. The jewels, the cut of the garment and hood are all reminiscent of Oriental art. The serious expression is somewhat affected by the enormous wheels which frame the grave countenance. It is altogether likely that the sculptor exaggerated the size of the gold jewelry, when he reproduced it in stone. (Plate XXII.)

The Lady of Elche is carved from a piece of brown limestone very close to the color of the early inhabitants of Spain. Tunic and mantle are polychrome,

Bust of Iberian priestess called the Lady of Elche. *(Museum of the Louvre.)*

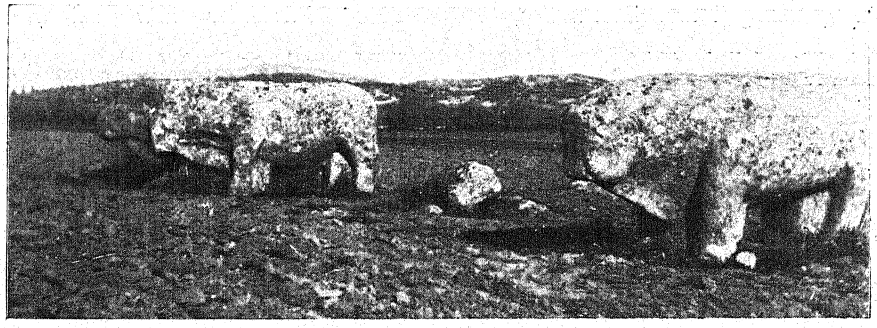


Fig. 235. — The bulls of Guisando. Ávila.

being tinted with the red and blue shades affected by the Greek artists. This marvelous head, justly considered a personification of Iberia, was executed in the Fifth Century B.C. The artist was no doubt versed in the traditional forms of Iberian sculpture, and had Greek models of early Ionian art.

An excellent evidence of the relations existing between Spain and the Orient is the collection of votive offerings consisting of a number of bulls' heads found at Costig on the Island of Mallorca (fig. 233). Many of the stone carvings of Iberia are also found reproduced in small bronze figures.

We also find among the relics of prehistoric Spain the figure of a bull with a human head, but it is not known by what mysterious means the primitive Iberians learned to reproduce this type which originated with the Babylonians. These figures are fairly abundant in Spain and all are the work of the early Iberians. The best known is the one reproduced in figure 234, at the Archaeological Museum of Madrid. M. Heuzey demonstrates beyond question that it is related to the monsters of Mesopotamia. The type is the same: the head is turned to one side in the same manner, the face is bearded and the knees and tail are bent in the same way. Indeed, the entire figure has the same majestic aspect as its Babylonian model. It is hardly to be conceived that two peoples so different would chance to originate such an unusual form, so we are convinced more than ever of the surprising tendency of the Oriental types to spread. But it is amazing that so strange a figure should be imitated in far-off Iberia and survive there so long a time. The heads of these Iberian bulls were

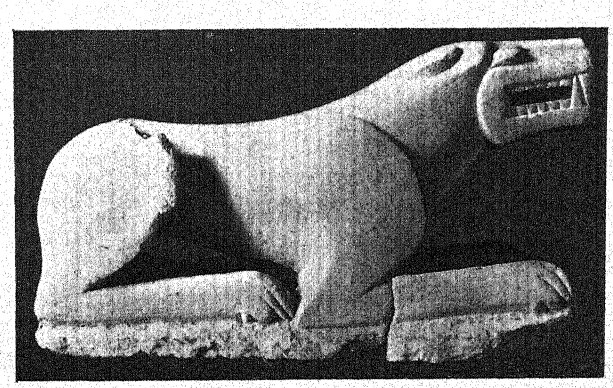


Fig. 236. — Carnivorous animal called the Iberian lion of Baena. *(Archaeological Museum of Madrid.)*

finally changed to animal heads, such as those of lions or other carnivorous animals; we note the same in terra-cotta ware (figs. 235 and 236). There are even long lines of them in pairs, probably an avenue leading to some funerary monument. They are finally transformed into pigs, and as such we frequently find them dating from the Roman period and bearing long Latin inscriptions of dedication.

Summary. — The kingdom of the Hittites in the mountains of northern Syria was one of the foreign countries which adopted the art of Babylonia. Here the palaces were of stone, but the sculptures and the inscriptions were in imitation of the art of Mesopotamia. In the mountainous countries of Lycia and Phrygia, both Greek and Oriental influences can be traced. In the stone tombs of Lycia we see the earliest examples of beams and roofs which afterwards became characteristic of the Ionian order of Greece. The Phoenicians imitated and exploited the types they borrowed from both the Egyptians and Assyrians. Practically nothing remains of the temple at Byblus. More relics survive in the Phoenician colony at Cyprus, such as sculptures, pottery and jewelry. Premosaic Palestine is now beginning to be known. In the Canaanean sanctuaries we find rows of pillars or menhirs. In Jewish times this country was, artistically, a Phoenician colony. The temple at Jerusalem can be reconstructed only from the descriptions of the Bible and Josephus. Of Carthage, another Phoenician colony, no architectural remains have survived from Punic times. Her colonies in Spain have yielded examples of sculpture and ceramics. A native Spanish art began to flourish in the Fifth Century B.C., but it was strongly affected by both Greek and Oriental influences.

Bibliography. — For the Hittites, WRIGHT: *The Empire of the Hittites*, 1884. — J. GARNSTANG: *The Land of the Hittites*, 1910. — For monumental works, O. PUCHSTEIN: *Klein-Asien und Nordsyrien*, 1890. — ORIENT-KOMITÉ, *Ausgrabungen in Sendschirli*, 1893. *Bogazköi Bauwerke*, 1912. — D. HOGARTH: *Carchemish*, 1914. — For Lycia, NIEMANN AND PETERSEN: *Reisen in Lykien*, 1889. — For Cyprus, L. di P. CESNOLA: *Cyprus*, 1880. — RICHTER: *Kyprus, die Bibel und Homer*, 1893. — A. S. MURRAY: *Excavations in Cyprus*, 1900. — For Phoenicia, E. RENAN: *Mission de Phénicie*, 1864. — For Palestine in premosaic times, H. VINCENT: *Canaan*, 1912. — *Jewish Ornament*, 1922. — For Hebrew art, M. de VOGUÉ: *Le temple de Jérusalem*. — PERROT AND CHIPIEZ: *Histoire de l'Art dans l'antiquité*, Vol. IV (also English translation). For Spanish archaeology, J. ROMÁN: *Los nombres de importancia de las islas Pitiusas*, 1906. — P. PARIS, *L'art et l'industrie de l'Espagne primitive*, 1905. — PARIS AND ENGEL, *Une forteresse ibérique à Osuna*, 1906. — SIRET: *Les premiers âges du métal en Espagne*, 1887. *Villaricos y Herrerías*. — The following monographs in the *Revue des Questions historiques* are important: SIRET: *Orientaux et occidentaux en Espagne*, and in *Revue Archéologique*, J. BONSOR: *Les colonies agricoles préromaines du Guadalquivir*, 1898. — SIRET: *Essai sur la chronologie protohistorique de la péninsule ibérique*, 1907. — D. DÉCHÉLLETE: *Essai de la chronologie préhistorique de l'Espagne*, 1908. — L. JOULIN: *Les âges protohistoriques dans la péninsule hispanique*, 1910. — P. PARIS: *Le trésor de Javea*, 1906. — VIVES Y ESCUDERO, *Estudios de arqueología cartaginesa*.

Fig. 237. — Iberian bronze found at Despeñaperros.
(Cabré Collection.)

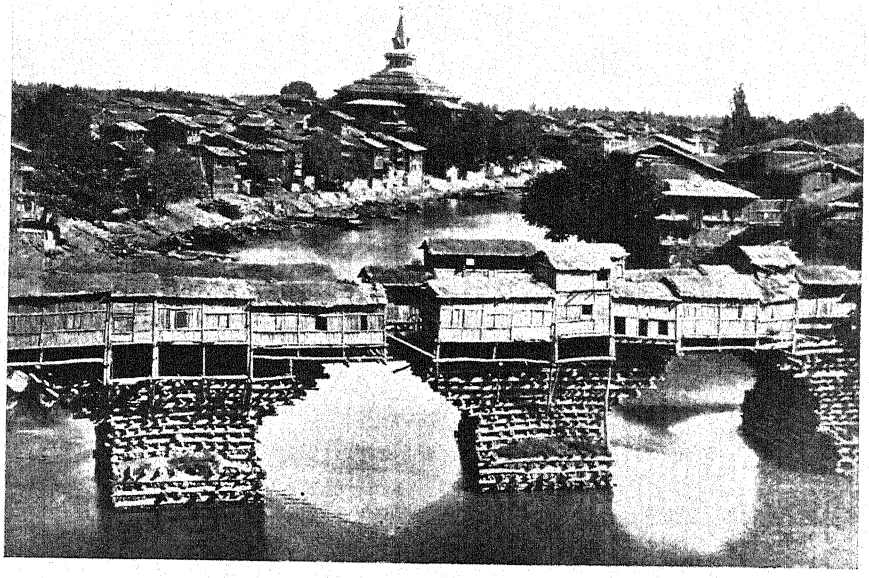


Fig. 238. — Wooden bridge in the highlands of northern India. KASHMIR.

CHAPTER X

THE ART OF THE FAR-EAST AND ITS RELATION TO OCCIDENTAL ART
BRAHMANIC ART IN INDIA. — GRECO-BUDDHIST ART. — KHMER ART.
THE ART OF CHINA AND JAPAN.

BEYOND Persia rises a barrier which effectually divides the peoples living on either side of it. It consists of the Pamirs and the high desert of Gobi. The journey across this country is long and difficult; the roads are bad and the mountain passes almost inaccessible. Indeed, there is no easy commercial land-route between the peoples of Western Asia and the very different races which have since time immemorial occupied the eastern half of that continent. The ancients knew little or nothing of this distant land, although they imported a few of its products, such as spices and textiles, which came by sea to the ports of the Persian Gulf, and it is reasonable to believe that an avenue of commerce leading through Mongolia and Siberia to the Caucasus has existed since prehistoric times.

Certain decorative themes may have been transmitted through this channel to the prehistoric populations of Greece and other portions of Europe; for a knowledge of Oriental art is sometimes indicated in their ceramics which did not originate with the nations of Western Asia, such as Assyria or Persia, with which the ancient Hellenic peoples were in direct communication.

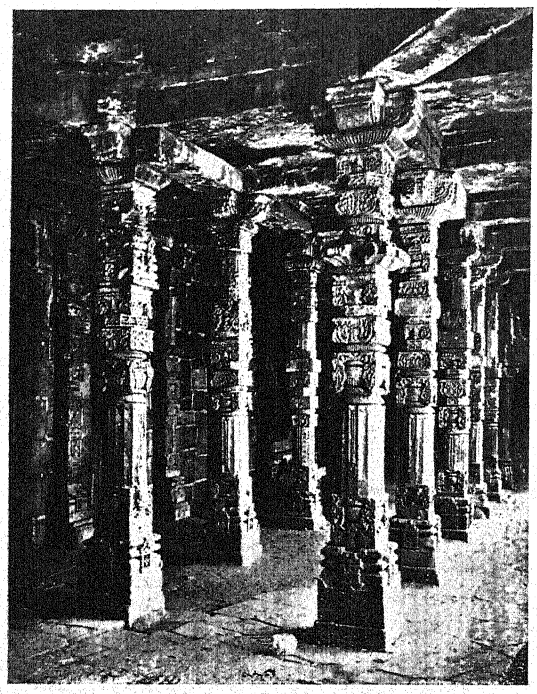


Fig. 239. — Seringham. Stone construction in imitation of a wooden ceiling.

The only people of the Far East known to the Greeks and Romans were the Hindus who dwelt just beyond the high mountains, and even they were vaguely believed to be a mysterious race endowed with supernatural powers. Alexander's expedition to India only added to their reputation for mystery, and Greek and Roman geographers and encyclopedists commented on the marvels related by the scientists who accompanied the great conqueror. It is from these men that we get our earliest account of the peoples of India in the Fourth Century B.C. We are also indebted to the narratives of the Chinese pilgrims who later came to India to visit the holy places associated with the origins of the Buddhist faith. The writings of the period of the Arab conquest add little to our knowledge, and it was only when Marco Polo and the Portuguese and Dutch explorers finally reached the Far East and brought back accounts of what they had seen that Europe began to have any definite knowledge of this strange world. We find in Portugal a late Gothic style that reminds us of the monuments of India, and the French art of the Seventeenth and Eighteenth Centuries was strongly influenced by the fabrics and porcelains imported from Eastern Asia.

The tastes of Europe have also had their part in the formation of Oriental art. Attempts were made in Japan and China to imitate the artistic methods of the Occident, but the only result was to denaturalize their own art. In recent years the Japanese have made strenuous efforts to counteract the influence of Europe, and a magnificent publication, "The Flowers of the Empire", reproduces in all their beauty the works of the older painters of the Far East and vindicates their artistic traditions. Prior to the revolution, European explorers brought back great quantities of material from the interior of China which was becoming every year more accessible. Now the treasures of many of the temples have been scattered, tombs have been violated and so many works of art have been acquired by the collections of Europe and America that it has become necessary to revise materially almost all our opinions concerning the art of the Far East.

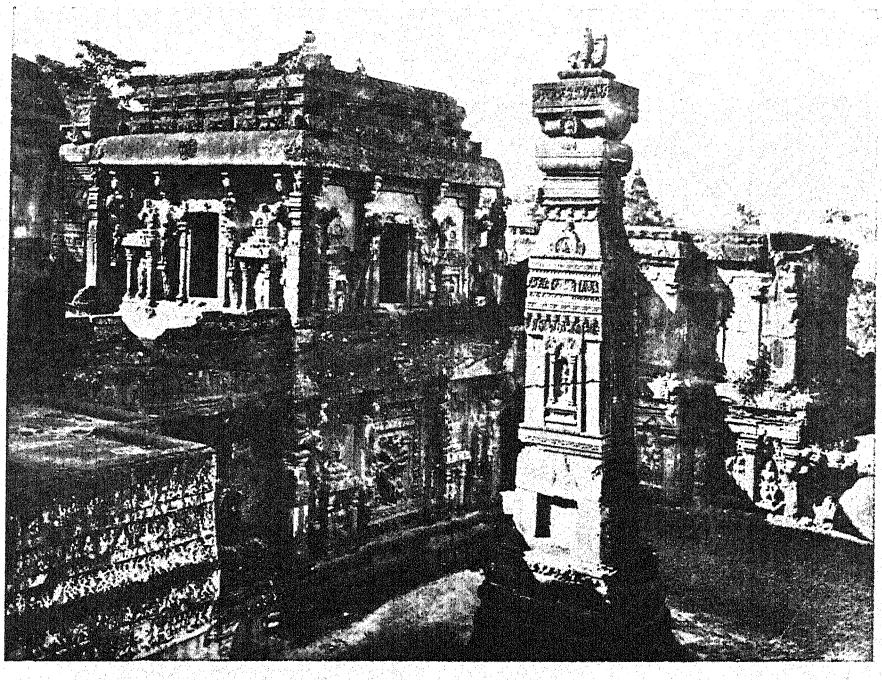


Fig. 240. — Court of the Kailas, excavated from the rock. INDIA.

INDIA AND CAMBODIA. — Our ideas regarding the antiquity of the art of India have been changed greatly during the last thirty years. The country has become better known. British troops have opened up the mountain regions of the north, small local museums have been created and a considerable number of publications have been issued covering the art, history and civilization of India.

It was long believed that India was the cradle of the European race and that here were founded the principal industries of civilization. The subterranean rock temples were thought to be contemporary with early Egypt, and monumental works were everywhere supposed to date back to the most ancient times. When a systematic and chronological study of Indian art and civilization was at last undertaken, it was discovered with surprise that the most ancient monuments of India date only from about the Third Century B.C. Most of the Vedas, in their present form at least, and the great epic poems of Indian literature turn out to be comparatively modern. The imagined hoary antiquity of India has faded away.

Nevertheless, it must be frankly admitted that some of the most complex manifestations of art and poetry are an elaboration of the work of indigenous schools which were much more ancient. The architecture of India, with its more or less conscious imitations, reflects the memory of an art native to the country, for it is very evident that its development required an environment rich in forests with a plentiful supply of timber. Wooden construction was so usual in early times that down to a late period the structures of stone preserved the

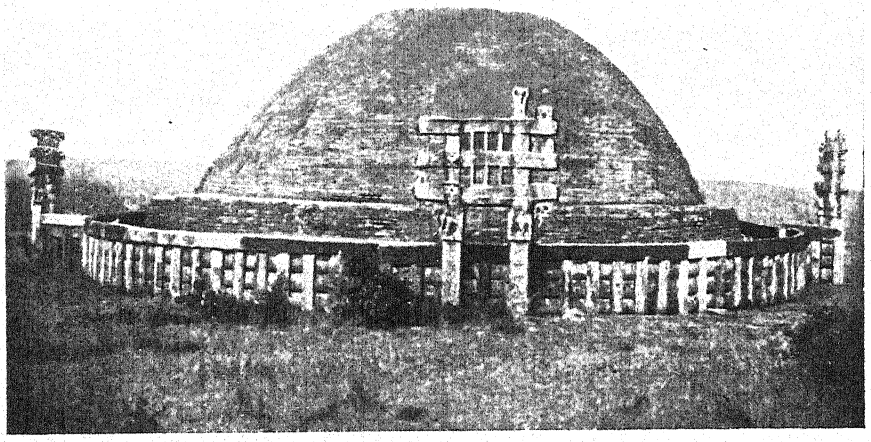


Fig. 241. — Buddhist tope, or relic-shrine. *Sanchi.* INDIA.

forms employed in timbered buildings (fig. 239). In the caves at Karli all the elements of a wooden frame-work are carved from the native rock; and when it was not practicable to carve from stone the required forms, the architects put in artificial wooden parts, but always with the purpose of supporting the vault of the roof of the cave. In the same manner we see indications of an architecture composed exclusively of wood preserved in ordinary modern constructions. When the supports for a bridge or a terrace are being built, the buttres ses are connected by a frame composed of trunks of trees, each course of which projects beyond the one beneath until the interval between is spanned (fig. 238).

This is quite in keeping with the accounts brought back by the scientific observers who accompanied Alexander. They told of the marvelous land of India, its forests and strange animals, and they described some of the monuments they saw. But in spite of their admiring descriptions of roofs and gateways plated with gold, the buildings were, so far as we can learn, of wood and richly covered. All the structures contemporary with Alexander's conquest have now disappeared. In our study of Indian culture we note a Brahmanic art which enjoyed a splendid renaissance in the Eighth Century of our era, and a Buddhist art bearing strong evidence of Greek and other Occidental influences.

The character of Brahmanic art may be studied to best advantage in the great rock-hewn temples. Space forbids our describing them one by one, and it is equally impossible to reduce them to a single type. Hall after hall covered with relief sculptures succeed one another, and tall isolated columns ornamented with strange mouldings rise like obelisks in the centre of courts excavated from the heart of a rocky hill (fig, 240). Brahmanic art did not adhere to any one

architectural style; it is interesting chiefly for its fantastic relief carvings. Only in the cave of the Kailas at Ellora are the rock-cut pillars arranged as in the classic basilicas. The capitals of the columns tend to conform to a definite type. Even the structural forms show a tendency to depart from the traditions imposed by the earlier wood construction of the time of the Macedonian conquest.

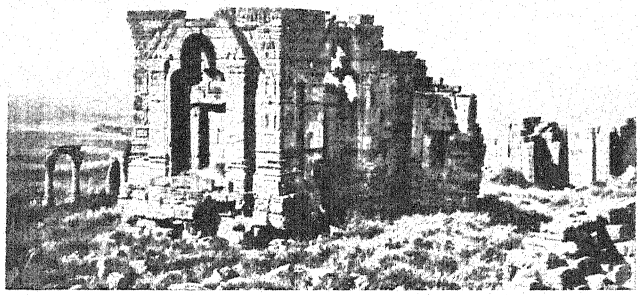


Fig. 242. — Vihara, or cell, in the Buddhist style of India.

But the development of this Brahmanic art was checked by the formidable growth of the Buddhist sects. The dissemination of this new philosophy attracted many of the members of the ancient castes of India away from the Brahman cave-temples. All over the peninsula and especially in the northwest a strange new art grew up which spread over a great part of Eastern Asia. Buddhism required new architectural types; the religious legends of Buddha and his companions were very different from the Brahmanic epics represented on the reliefs of the caves of southern India. Immediately after the death of the founder of the new faith it became necessary to collect the holy relics associated with his life and ministry and to enshrine them in small commemorative monuments. This was the purpose of the topes, or stupas, which are found in such great numbers in the broad zone extending across the northern part of Hindostan. Each marks the spot where some memorable episode of Buddha's life occurred or is the depositary of a precious casket containing a bone or other holy relic of the founder of this religion. The topes are small hemispherical structures, the dome rising little above the surface of the ground and crowned by a stone column ornamented with smooth bands or circles (fig. 241). Except for this fanciful embellishment, the tope is usually without ornamentation. It is set upon a platform faced with stone in imitation of wood construction which is either square or circular. The interior of the dome is a solid mass of rough stone reinforced by radial walls which give it the cohesion necessary to hold in place the exterior casing. Almost all these topes have been partly destroyed by treasure-hunters in search of the casket or reliquary, contained in the dome, but the representations on Buddhist reliefs enable us to ascertain the precise forms of these structures when they were still intact and surmounted by the stone column.

The tenets of Buddhism and the example of its founder were an incentive to asceticism; so we usually find beside the tope a *vihara,* or small cell for the anchorite who lived there and consecrated his life to the care of the sacred

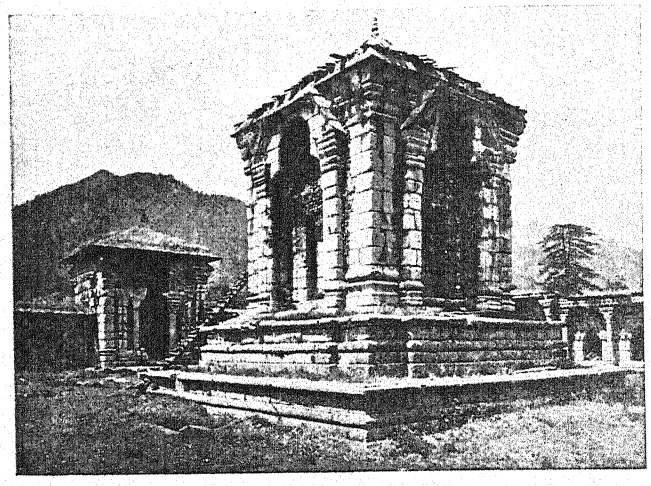


Fig. 243.—Vihara set within the cloister of a Buddhist monastery. INDIA.

spot. These viharas are small rectangular structures containing a single small room. The religious veneration inspired by this lone monk led to the decoration of these viharas which became more and more elaborate as time went on, and we find graceful chapels of carved stone with columns flanking their doors, mouldings and other architectural ornaments. The gabled canopy over the doorway gives these buildings an appearance that is anything but Oriental; the outline resembles that of a Greek temple. It is in this type of Hindu construction that the influence of Hellenic art is most evident (fig. 242). Even the capitals of the columns are ornamented with volutes and acanthus leaves, and although we find certain departures from the original Greek model, all the elements of the Corinthian capital are there (fig. 245). As time went on and Buddhism began to triumph throughout Eastern Asia, the tope, or relic-shrine, together with the vihara and its monks began to attract to the sacred spot pilgrims from many parts. Other hermits came and more cells were required; the tope became enclosed by a rectangle of surrounding viharas, the whole forming a sangharama, or monastic cloister not unlike the European monasteries of the Middle Ages.

Later on, these sangharamas with the subsidiary buildings required by a religious community were limited in their size only by the means at the disposal of the monks, but for a time they consisted only of the rectangular enclosure composed of the viharas with their cells opening toward the interior of the court and facing the tope in the centre. Finally these monasteries were made to contain not only the living monks, but also an ever increasing population of images, each of which required a shelter in keeping with the veneration in which it was held. These statues gradually crowded out the monks from the inner court; the viharas surrounding the tope were converted into chapels, or shrines, and the community was obliged to build a new cloister, plainer than the first, containing the principal apartments required for monastic life, like the chapter-house and the refectory as a Christian monastery (fig. 243).

The structural technique of these great Buddhist monasteries leaves much to be desired. They were usually built of roughly hewn stone blocks and coated with a gypsum stucco upon which were moulded figures and reliefs. Their walls often bulge and sag; the most famous Buddhist monasteries of northern India

are now in ruins and are being excavated by the officers of the British army stationed in that country. But Buddhist communities continued to exist in the other countries over which the religion spread. In Thibet, China and Mongolia we are able to study the activities of the monks inhabiting a sangharama. The isolated tope is also found in Cambodia. It is an indispensable feature of the temples in the interior of Asia.

But more important than architecture as a vehicle for the spread of Buddhist art were the carved statues and reliefs. Architecture was compelled to adapt itself to the forms required by the building material of the country in which it found itself, but the same sculptural themes could be copied anywhere. This is the more important on account of the unusual circumstances under which Buddhist sculpture developed.

Fig. 244. — Buddhist relief. *Amaravati.* INDIA.

Buddhism began to spread just at the time when communication was established between the Hellenic Occident and the Far East. Subsequent to Alexander's expedition to India an independent Greco-Bactrian kingdom was founded to the northwest of India by the successors of the conqueror which for a time included a portion of India. Here the Greek leaders were naturally desirous of keeping open the mountain passes and maintaining relations with the nations of Western Asia, the land of their origin. The coins of these Bactrian kings are Greek in type. So we have in northwestern India and extending down to the Hindus a Hellenistic element which contributed not a little to the development of the religious sculptures representing the story of Buddha. We see the latter standing or seated with crossed legs and wearing a long mantle with narrow folds in imitation of those of the Greek statues.

This representation of Buddha was the means of spreading throughout the Far East the marvelous arrangement of drapery originated by the Hellenic sculptors. In gigantic reliefs sculptured on rocks, along the rivers of China and in the temples of far-off Japan we find the figure of the great reformer standing or seated, immobile, in his eyes the languid expression peculiar to the Asiatic, but always clad in the full mantle of the Occident, the garment of the Greek philosophers so familiar to the student of Hellenic art (fig. 246).

But imitations of things Greek were not confined to coins, architecture and

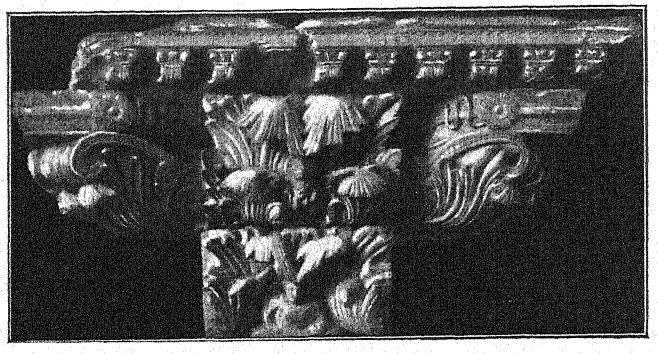


Fig. 245. — Corinthian capital of a Buddhist monument. INDIA.

statuary; the influence of this art is also felt first and foremost in purely decorative themes. They introduced into India the bands of garlands supported by children as well as the practice of dividing the composition by setting the reliefs into square compartments or rectangular niches. In Buddhist art the Orient not only imitated the Occident, but even seemed about to compete with it.

Even the departures from the Greek models in the course of their adaptation to this art are extremely interesting to the student. We see in some of the errors of these pseudo-Greek artists of India the same tendencies that we find in certain provincial schools of classic art among the partly civilized peoples of Europe. At first sight it would be easy to mistake certain Buddhist reliefs for the works of the artists of Gaul or Thrace during the Greco-Roman period.

To the European student this Greco-Buddhist art is more instructive than genuine Eastern art with its disorderly profusion of decorative elements. We are interested beyond measure to see in this remote land and among an alien race the decorative themes of classic art interpreted in the spirit of the East. From the contrast afforded we are enabled to perceive the nature of our own artistic reactions.

So long as Buddhist art flourished in India the old Brahmanic castes never ceased to combat it with all the ancient traditions of their race. By the Eighth Century the people of India became weary of this never ending religious struggle, and a reconciliation of the two sects took place. The people returned to the old Brahman faith which in turn adopted to a considerable extent the concepts of Buddhism, especially in the north of India. With this compromise Buddhist art lost its purity in India. To this revival of Brahmanism belong the great pyramidal pagodas which are, perhaps, the most interesting structures in all India. One of the most striking of these monumental compositions is the temple of Seringham with its pagodas shaped like stage-towers serving, like the Egyptian pylons, to ornament the gateways to the sacred enclosure (fig. 247). Unlike the Buddhist monastery, the Brahman sanctuary is not the retreat of a religious community, but rather a collection of halls for the accomodation of multitudes of pilgrims, parks containing sacred ponds and open porticos, all crowded with fanciful and complicated sculptural compositions (fig. 248).

The richness and profusion of the ornamentation of these Hindu temples overpowers the Occidental mind, accustomed as it is to an entirely different type of beauty. To its exotic character is added the overwhelming effect pro-

duced by its enormous mass. Not only are the pagodas, or *gopuras,* quite high, but they are divided into horizontal bands of reliefs which give them a still loftier appearance (fig. 249). Others are pyramidal piles of spire heaped on spire overtopping one another in incalculable profusion. Some of these *gopuras* date from the period of the Arab invasion when the peninsula of Hindostan fell so suddenly under the sway of Islam. The Arabs, long familiar with the architecture of the Byzantine Empire, introduced the dome, though in India it was often composed of a solid mass of masonry.

Fig. 246. — Buddhist art. Statue of Buddha. *(Museum of the Louvre.)*

From this period date the great military constructions of India such as the gates and walls of Delhi and Benares which will be discussed when we take up the Mohammedan art of India. Prior to the time of the Mogul conquest, India was not in need of military defenses, protected as she was by her rigid caste system within and by sea and mountains without. The existing civil architecture of India, such as the palaces of her princes and rajahs so famous at every period of her history, also belongs to this Indo-Arab style, for the more ancient examples were of wood and have long since disappeared. There are no monumental tombs of this period in India; the tenets of Buddhism opposed the idea of vainly attempting to preserve in splendor man's perishable shell. A school of this newer Brahman art combined with certain Buddhist themes also developed in Indo-China. In the tropical forests of Cambodia we find the ruins of two magnificent groups of buildings abounding in relief sculptures of fantastic monsters and strange mythical personages. This Cambodian, or Khmer, art was a revelation to Europe when the Colonial Minister exhibited at the Paris Exposition of 1889 a number of casts and drawings representing the art and architecture discovered at Angkor. Never could the Occidental mind have conceived of such an extraordinary and complicated combination of wild fancy and genuine artistic merit. But the impression produced was not lasting; the monuments of Angkor remained almost forgotten until General Beylie, the governor of the colony and an enthusiastic archaeologist, cleared away the forest growth from the ruins and even revived the festivals represented in the reliefs. Today there is even a community of yellow robed Buddhist monks installed in the temple.

We know almost nothing of this Cambodian kingdom of the Khmers who

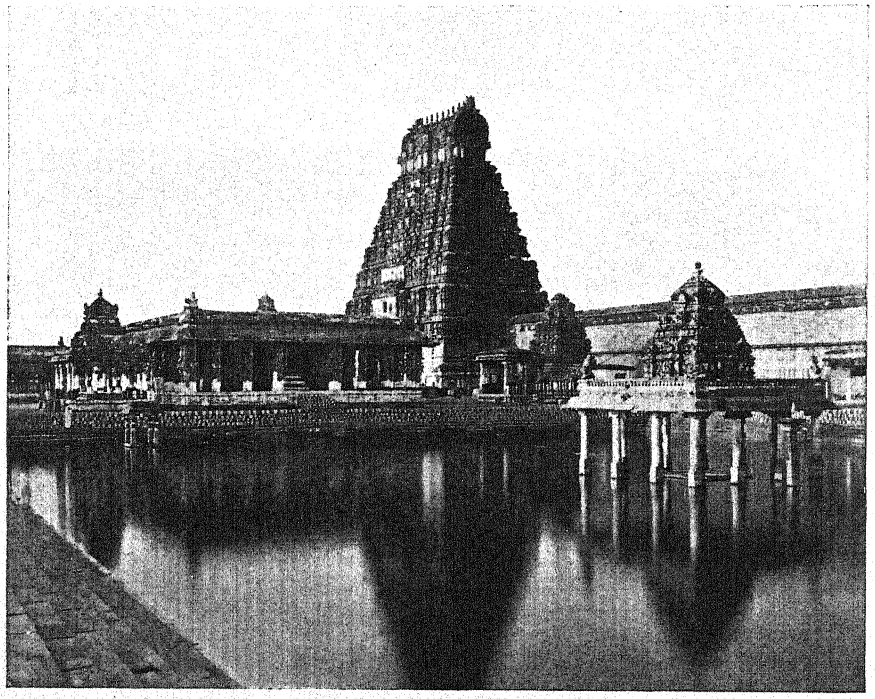
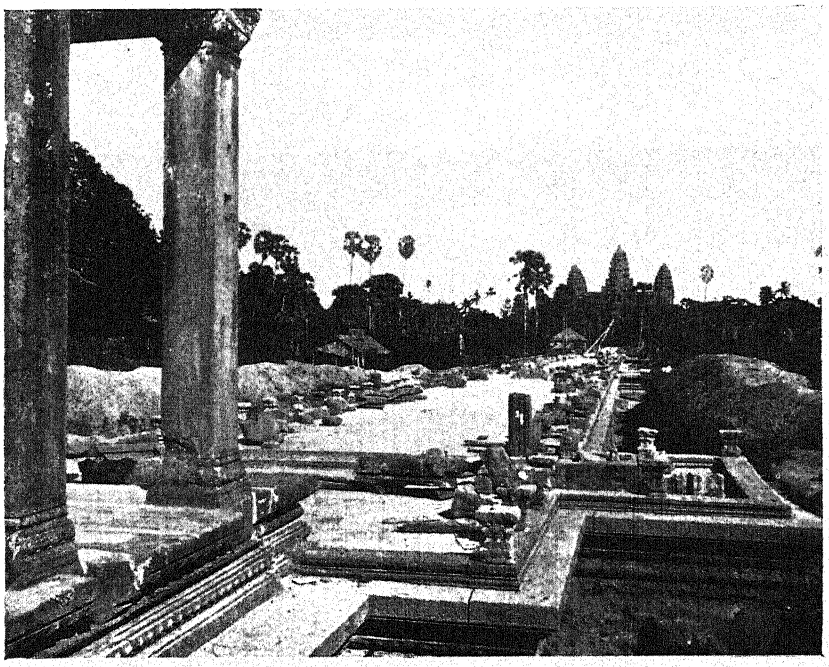


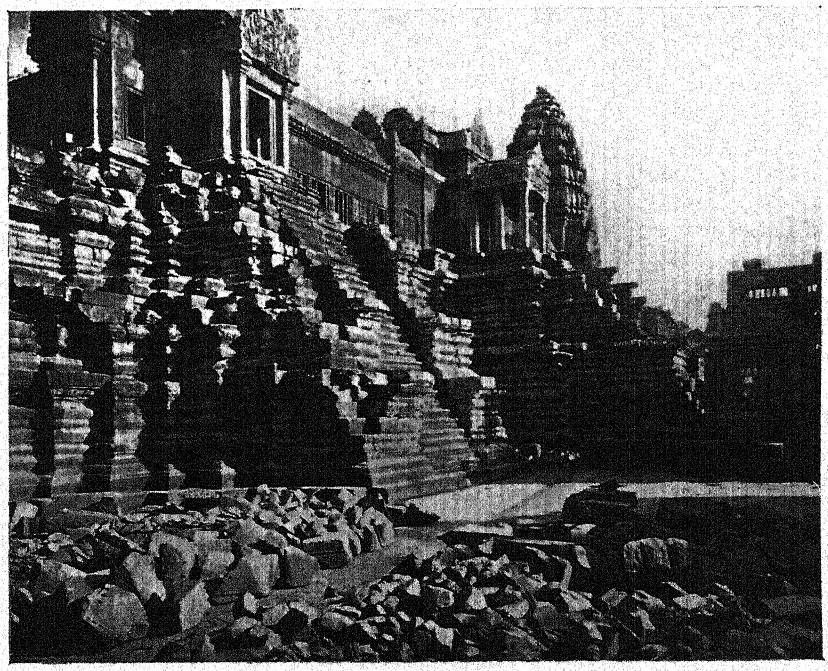
Fig. 247.—Brahman temple of Seringham. INDIA.

possessed sufficient resources and artistic ability to erect the magnificent and colossal structures at Angkor. No literary tradition has come down to us that enables us to reconstruct the history of these people. Their art was monumental in character, and their reliefs and other sculptures serve only to establish two or three fundamental facts. The Khmer art of Cambodia is Indian beyond all question. A detached branch of the great Hindu family established itself in Cambodia, probably at a time when things were becoming uncomfortable in many parts of India for members of the Buddhist sects. This Aryan art of Hindostan is not to be mistaken; it is very different from that of the yellow peoples of Indo-China. A statue was discovered in the ruins at Angkor of a seated king who is called the "Leper King" by popular tradition and who is supposed to have built the city. This nude crouching figure, now in the Louvre, corresponds closely both in countenance and style of execution to the standing figures of Buddha already mentioned. We note the same Hindu characteristics in the relief sculptures which cover the walls at Angkor.

It is evident that the founders of this Khmer kingdom were Hindu invaders who were well versed in all the traditions of Buddhist art. The capital at Angkor seems to have covered an immense area judging by the extent of ruins. Like all great nations, this people must have had its days of glory. It is enough, perhaps, to say that except for the pyramids of Egypt the temple of Angkor-Vat is the greatest stone structure ever raised by the hand of man.



Monumental avenue and entrance to the temple. ANGKOR-VAT.



The great stairway of the temple. ANGKOR-VAT.

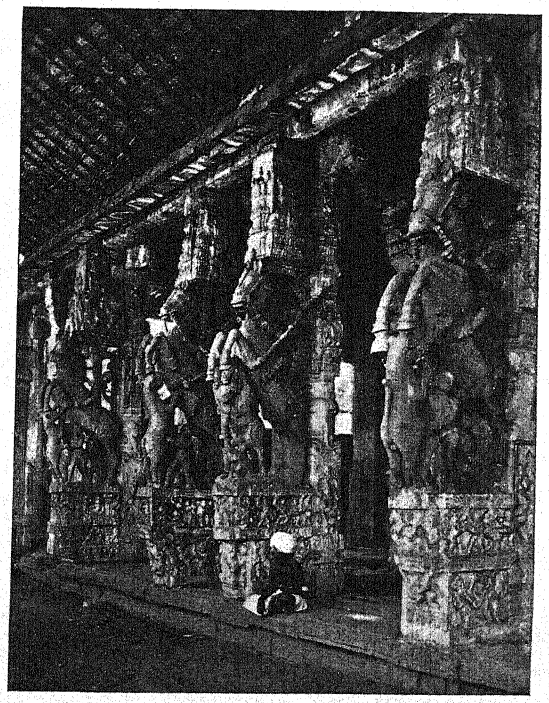


Fig. 248. — Portico of the temple of Seringham. INDIA.

We see in the reliefs at Angkor the military expeditions, the retinue and the court festivals of the unknown successors of the "Leper King". The only definite information we have concerning the history of Angkor is that of its capture and sacking. It was taken twice by the Siamese, once in 1353 and again in 1372. Subsequent to the latter date the kings of Cambodia moved to the east, first to Lovek and later to Pnom-Penh where a shadow of the old kingdom still exists under a French protectorate.

The structures at Angkor consist of two groups. One is called Angkor-Thom and appears to have been the residence of the kings; the other, Angkor-Vat, is evidently a monumental temple. At Angkor-Thom we find a strong wall thirteen feet high; but both within and without the rank vegetation of the tropics has grown for centuries hiding the pyramidal pavilions with their horizontal bands of reliefs. The broad avenues of this Versailles of the Far East are still to be traced leading to artificial basins equipped with landing-places (fig. 250).

One of the most prominent features of Angkor-Thom is the tower with its four enormous heads of Buddha forming the four façades. They rest upon the superimposed substructures and are crowned with great complicated head-dresses resembling cupolas.

The pavilions of the royal palace at Angkor-Thom are not yet cleared of the thick forest growth which enshrouds them. One traveller recounts his impressions as he mounted the terraces and towers at Angkor. As he ascended the trees seemed higher and higher, and when he looked out from the topmost pinnacle nothing could be seen but an unbroken sea of foliage extending to the horizon in every direction. The main building of the great temple of Angkor-Vat is a narrow rectangular hall in the centre of an ever rising series of concentric courts. The Khmer architects were unacquainted with the vault and could roof their apartments only by advancing each successive course of stone toward the center. It is difficult to believe at first sight that the nucleus of this majestic structure is a single long hall. The interior of this apartment is covered with reliefs arranged in horizontal bands or framed by niches and projecting architec-

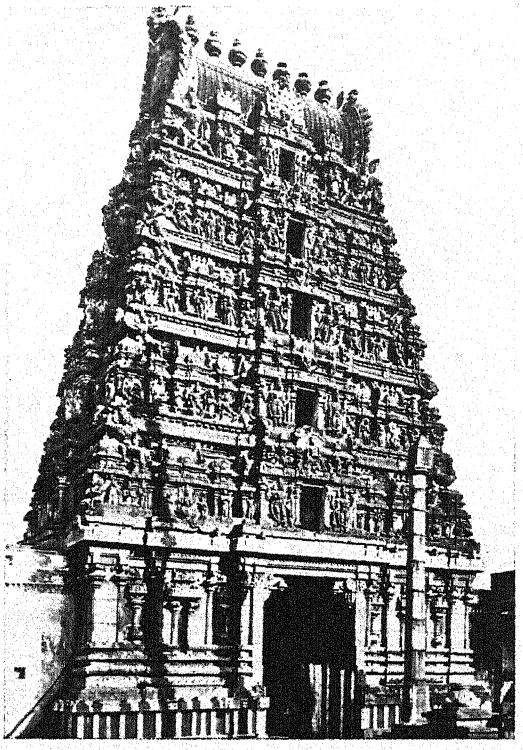


Fig. 249. — Gopura at Conjeeveram. India.

tural features. Here we see representations of dancers, Buddhist ceremonies and rows of monsters interrupted only by mouldings and other raised work.

The galleries connecting the pavilions at Angkor are lighted by windows in which stone openwork in imitation of wooden lattices softens the light from without. (Plate XXIII and figs. 250 and 251.) Sometimes this openwork, chastely figured, is employed as a decorative element separating the reliefs between the windows.

These buildings at Angkor represent the highest achievement of the complicated Brahmanic style. It is an art abounding in exquisite details, but lacking the orderly and logical arrangement to which the Western mind has always been accustomed. Buddhist art seemed about to inculcate this principle in the mind of the people of India and by means of its sculptures, almost Hellenic in character, to spread its ideas throughout Eastern Asia; but the ancient tradition of Hindu art and mythology absorbed only a portion of the technique of the Greeks and its spirit was not in anywise transformed. The reliefs of Angkor-Vat are perhaps the best example we have of this relapse of Oriental art (fig. 252).

Easterners themselves have always possessed a certain conception of the difference between the Oriental and Occidental mind as well as of the unalterable nature of Hindu art. At the Persian court, subject to the influence of both Syria and India, the poet Masnavi imagined the king sending for a Greek and an Oriental artist to compete in the decoration of a wall. First the Oriental covered it with figures from top to bottom; then the Greek came and cleaned it completely, leaving its white surface and precise lines gleaming in the bright sunlight. This rather confirms the opinion that while Western artists are often weak and uncertain in their handling of color, they cannot be excelled in their precise treatment of line and form. In this respect the Oriental is confused, eccentric and capricious.

But with all our classic prejudices and accustomed as we are to a totally different type of beauty, we may still appreciate the esthetic qualities of the

peoples of Asia. No school of art is without justification if it is sincere in its work, and beauty is always absolute and not the special prerogative of a single race.

There also existed in India a school of painting which enriched with color the reliefs of the temples. We still find in the caves of Ajanta a series of great frescoes which are the oldest paintings of Eastern Asia.

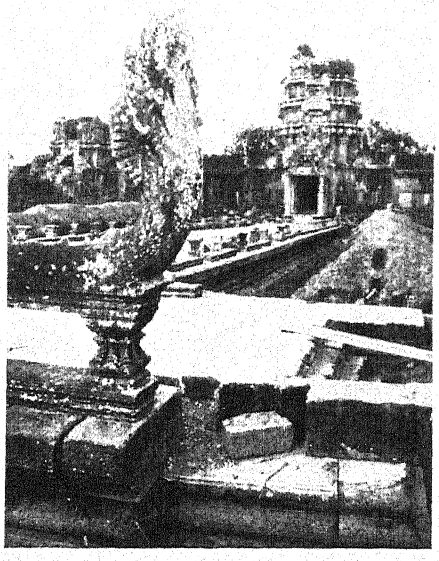


Fig. 250. — Entrance to the first court in line with the main avenue of approach. ANGKOR-VAT.

CHINA AND JAPAN. — Notwithstanding all that we have said, the yellow races of Asia do not display the same taste for agglomerations of forms as we have seen in India. Although they lie still further to the east, China and Japan were destined to create an art with clearer ideals and in which was to be revealed a new strength for naturalness superior, perhaps, to that of the Occident. We shall briefly discuss the schools of these countries and sum up in a few words our knowledge of the spiritual world of the yellow races, a subject to which an entire volume could hardly do justice.

China appears to have already had an art antedating the influx of Buddhist influences from India. The most ancient records of this country are filled with references to famous painters and artists, but we know little or nothing positive of this early Chinese art. Certain bronzes in the Imperial collection (great metal drums, or sacred vessels for wine, which are plainly the work of a primitive art with their coarse lines irregularly interlaced) seem to be contemporary with the first dynasties of China; indeed, they may antedate the organization of the monarchy and belong to the period when the country was still divided into clans or independent tribes. A few at least are ascribed by Chinese antiquaries to the period of the Hsia dynasty about 2000 B.C. Others are not so old and their profuse decoration places them as belonging to the Chow dynasty which ruled from 1100 to 255 B.C. (fig. 253). Here we find line decorations, spirals, and conventionalized dragons and birds which remind us of the decorative motives of the Maoris and the natives of New Guinea and other islands of the Pacific. These Chinese bronzes also recall to our minds the ornaments of the Alaskan Indians and the monuments of Mexico, and some investigators even go so far as to assume that there was a prehistoric art common to all the peoples of the Pacific which included China. They believe that its principal centre may have been in the south of that country, and from there it spread to the islands of the

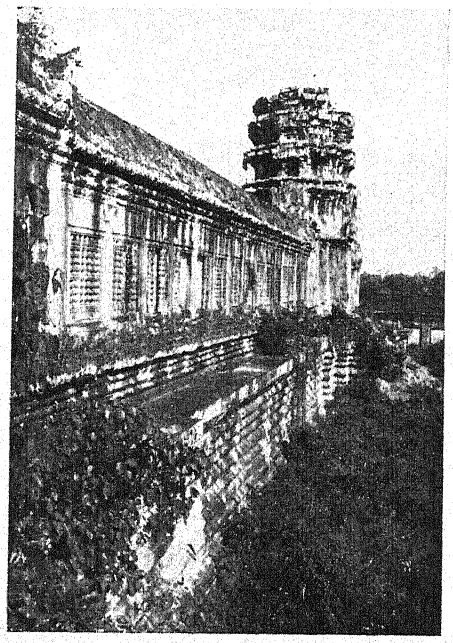


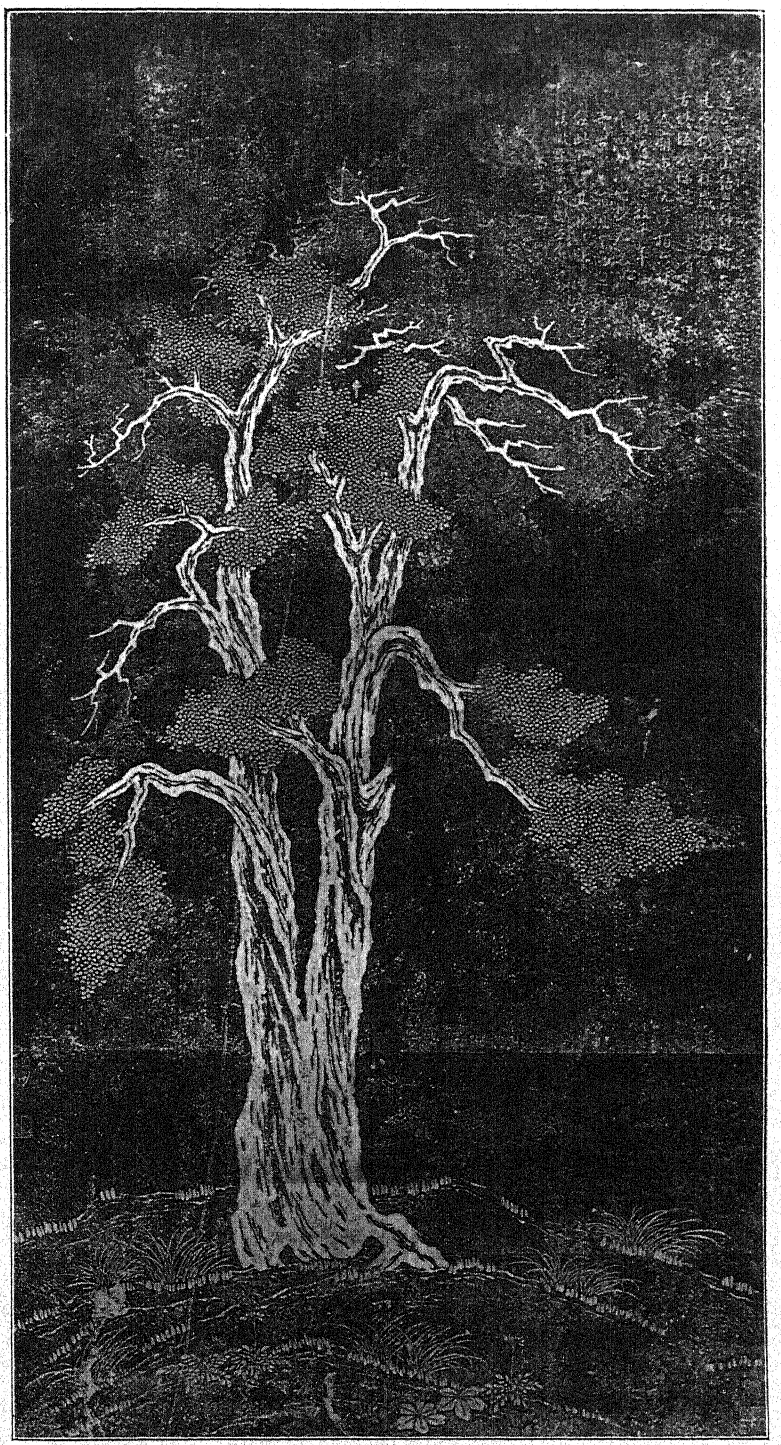
Fig. 251. — Tower and cloister of the first story of the temple at Angkor-Vat.

Pacific and Central America. Expeditions into the interior of China have also brought back casts of reliefs with innumerable figures outlined in profile taken from square columns. These appear to be extremely old, antedating even the influence of Buddhist art. They display an extraordinary clarity of vision in their representation of the movements of animals, and the calm and repose of plants are shown with great naturalness. We reproduce the most remarkable of these reliefs, or monumental engravings, which is known as "the tree of the Han". It represents an old tree partially denuded of its leaves, which served as a landmark between the two provinces. The tree was evidently beginning to die, and it is probable that it was depicted in order to perpetuate its spirit and that its semblance might continue for centuries to mark the place where it once stood. (Plate XXIV.)

Other monuments which likewise bear evidence of a very ancient artistic tradition are the colossal figures of warriors and animals in pairs which line the avenue leading to the Imperial Tombs at Nanking (fig. 256). Other sculptures similarly arranged, but set in a semicircle in front of a tomb and consisting of mythical personages and rigid monsters, have been recently discovered by scientific expeditions. The tombs at Nanking were those of the first emperors of the Ming dynasty of the Sixteenth Century, but there are others which are much older. China with its deeply rooted ancestor-worship would naturally be expected to preserve in her tombs great quantities of important archaeological material. The tombs themselves are subterranean and consist of a vaulted chamber approached from a sacred enclosure with its monumental gateway and avenue of sculptures. At first the deceased appears to have been buried together with his slaves, wives and horses which were sacrificed in order to accompany their lord and master to the land beyond the grave. Later, however, human sacrifice was abolished and it sufficed to surround the dead with the clay figures which we find today in such quantities. Up to the present time the tombs of China have been regarded with veneration and most of them still remain inviolate.

But ancestor-worship, while it was never abandoned, was relegated to second place with the introduction of Buddhism.

The later religion did not reach China until about the year 67 A.D. A pious



The sacred tree of the Han. Rubbing of stone relief. CHINA.

emperor inspired by a dream of the birth of a divine being sent emissaries to India, and these returned accompanied by monks who brought books, relics and reliefs (fig. 257). Buddhism, which in India had to combat a tradition hostile to its principles of asceticism, found in China a more receptive field. Confucius, the philosopher of resignation and lover of peaceful compromise, had already prepared his people for the ascetic tenets of the Buddhist faith. The new religion spread rapidly throughout China; monasteries sprang up everywhere; and, most important of all, Buddhist art and dogma were preserved in all their purity. It is for this reason that the recent discoveries which have succeeded one another in China are of especial interest; they enable us to follow in detail the various stages of Buddhist art.

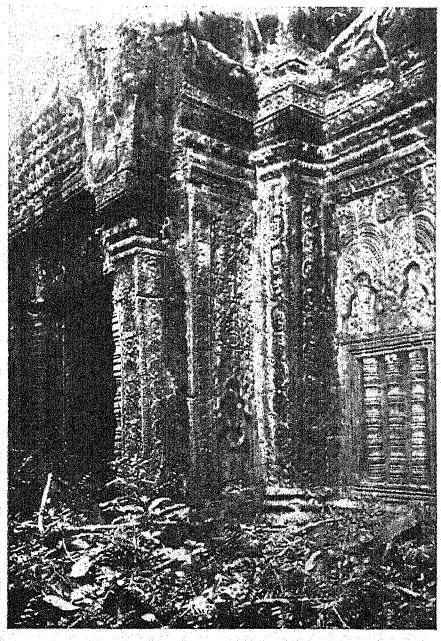


Fig. 252. — Partial view of the portal of the temple of Angkor-Vat.

Only a few years ago it was extremely difficult to visit the countries lying between India and China, that is, the northern and western provinces of the Chinese Empire. Sven Hedin was the first daring explorer to leave India and cross Chinese Turkestan, where he discovered in the district of Khotan a series of cities which had been abandoned since the Eighth Century. These are without doubt veritable Chinese Pompeiis dating from the period of the spread of Buddhism. Later two German expeditions went to Khotan by way of Russia and returned with a large number of relics, tablets and sculptures. It was not long ago that the Louvre opened the halls containing the finds of the French expedition to Chinese Turkestan called the *Mission Pelliot*. These explorers had the good fortune to discover in the ruins of a Buddhist monastery the hiding place of treasures, paintings and books abandoned by the monks in the Ninth Century of our era. Another French expedition headed by the Professor Chavannes of the University of Paris published two great atlases of the monuments of northern China, and there is also a recent publication by Stein on the ruins of the deserts of central China (fig. 260). Here, indeed, do we find the connecting links between the art of China and that of India and Persia.

Now that the results of these expeditions have been placed in their proper chronological setting, it is possible to hazard an opinion concerning the history of art in the Far East. We shall see how faithfully China preserved the classic traditions of Greco-Buddhist art. The Chavannes photographs of the caves of Yun-liang show the group of gigantic sculptures and reliefs found in the mountainous

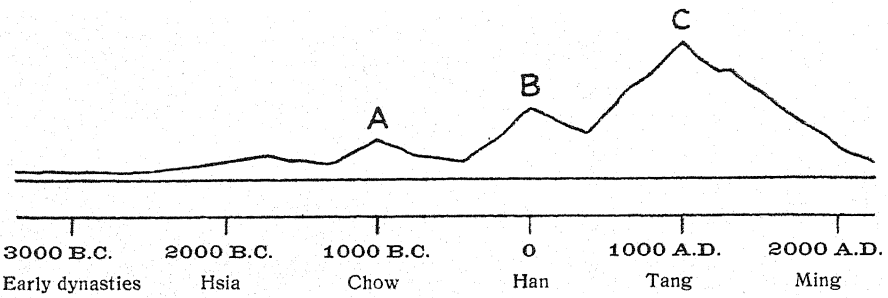


Fig. 253. — Evolution of Chinese art from the year 3000 B.C. down to the present time. Curve.

country of northern China, and we see how the principles of the Indian school of Greco-Buddhist art were preserved down to the Sixth Century. Many of these enormous figures are carved on the stone walls, which are also covered with innumerable smaller reliefs of minor personages set in niches. There is, however, hardly a noticeable difference between the reliefs of this Buddhist Pantheon of northern China and those of the semi-Greek Buddhist art of India. Perhaps their only mark of distinction is in the peculiar emanation of serenity and peace so typical of Buddha. In China it attains a deeper abstraction and expresses with even greater gentleness that resignation to the will of the Infinite. (Plate XXVI.)

In another group published by the Chavannes expedition we see Chinese art advance another step in the Eighth Century. These are the reliefs of the caves of Lung-men representing the processions of monks and other ceremonies of a Buddhist religious community (fig. 259). They are executed with great skill; indeed, the figures appear to be portraits.

These reliefs of Lung-men, with their pictorial feeling for drapery in the folds of the garments and their arrangement in near-perspective on the face of the rock, afford some of the most valuable indications we have of the nature of early Chinese art.

Fig. 254. — Prehistoric Chinese tripod.

Until the Eighth Century there were apparently no artists in China sufficiently independent of the Greco-Buddhist tradition to constitute what could be called a genuinely native Chinese school. Their principal work consisted of the portraits which were set in the temples or kept at home to perpetuate the memory of their ancestors (figs. 261, 262 and 263). Only rarely do we find portraits in the tombs; it was sufficient to

represent the deceased by an engraved stone on which was a specimen of his handwriting. It is well known that caligraphy is considered one of the fine arts among the Chinese, and, like music among ourselves, it is regarded as a manifestation of the spirit of a great man. About the burial chamber, in which this autograph held the place of honor, were set marvelous sculptures of his courtiers, friends, servants, musicians and dancers (fig. 264), and even his favorite horse as well (figs. 265 and 266). The buildings of China are of wood or of stone in imitation of a timbered structure. They are ornamented with gilded dragons, lacquer and terra-cotta, but they are very different from the monumental structures of India and Indo-China. The Imperial Palace at Peking which was occupied by the European forces during the Boxer Rebellion is nothing but a vast park containing bridges and kiosks, and a spacious perspective is everywhere lacking. It is surrounded by a great stone wall broken by gates and towers decorated with terra-cotta ornaments. (Plate XXV, 3.) The pagodas of China with their many-storied towers and tiled roofs seem to have been derived from the stone *gopuras* of India with their step-like bands of decoration.

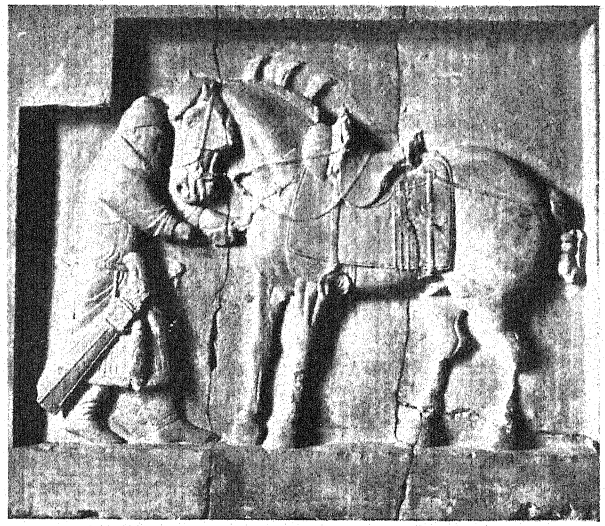


Fig. 255. — Stone bas-relief of the famous horses of Tang. *(University Museum.)* PHILADELPHIA.

Neither the cult of ancestors nor the philosophical religion of Confucius

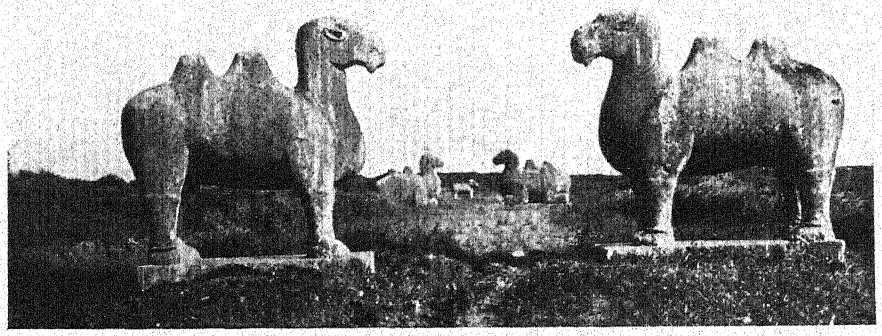


Fig. 256. — Avenue of the dromedaries. Imperial tombs. Ming dynasty. NANKING.

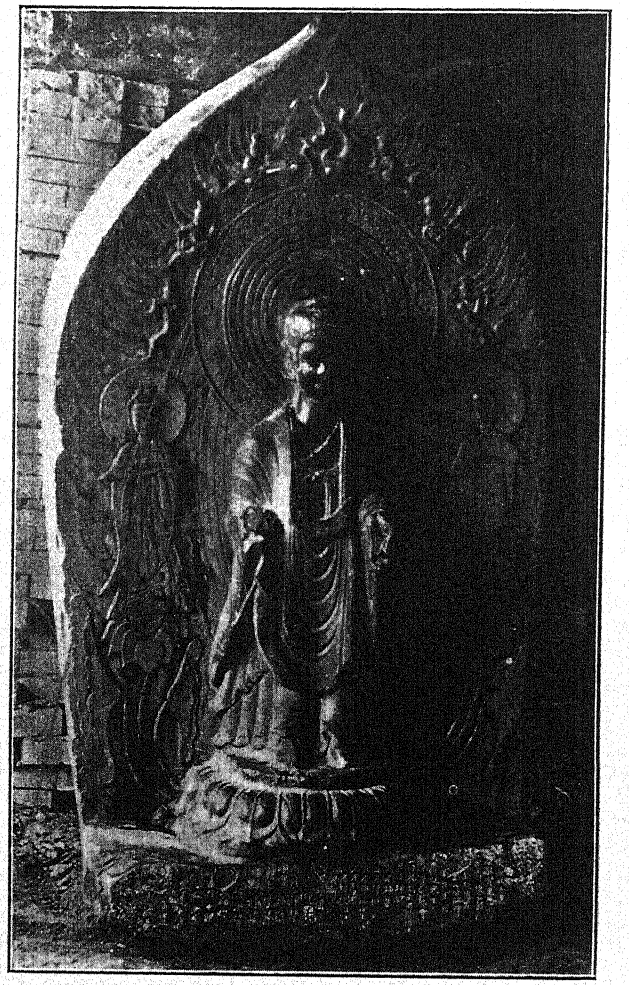
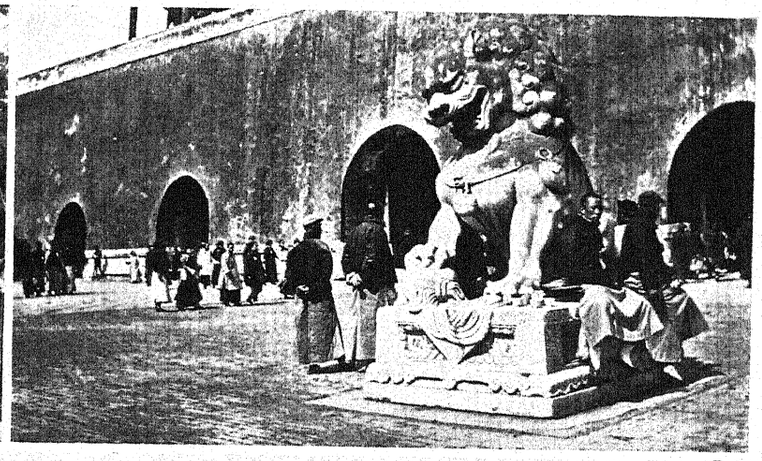
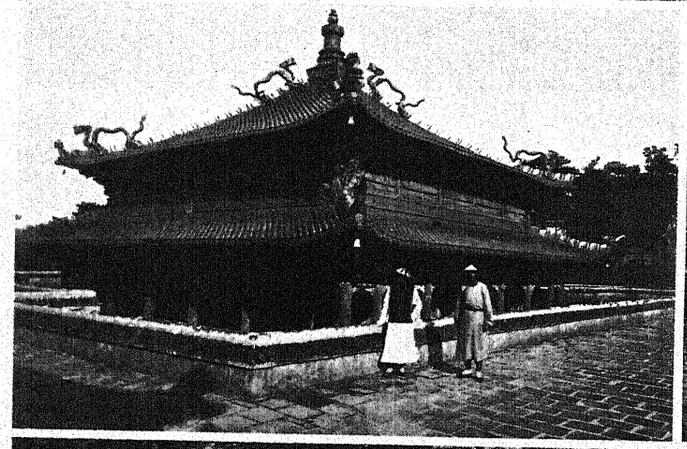


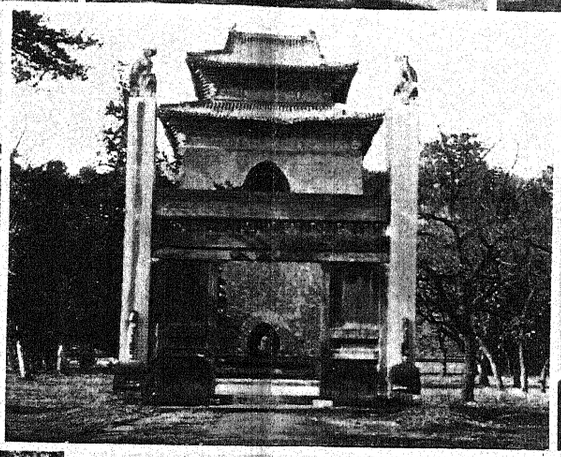
Fig. 257. — Early Buddhist relief. CHINA.

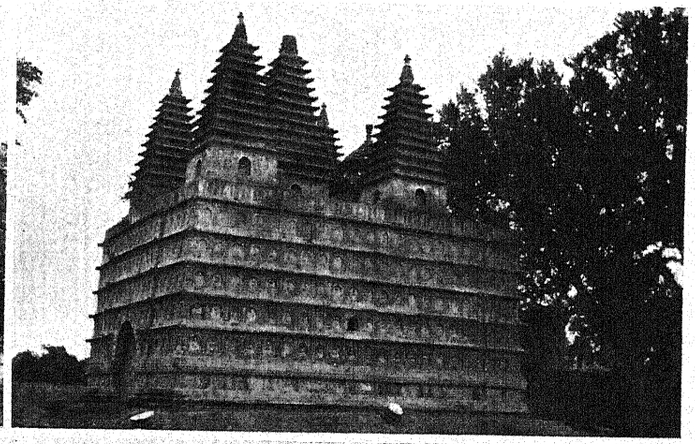
call for the construction of great temples. As for military architecture, the main defence of China may be said to consist of the Great Wall which extends across the whole of the north of China, broken at intervals by monumental gates. (Plate XXV, 8.)

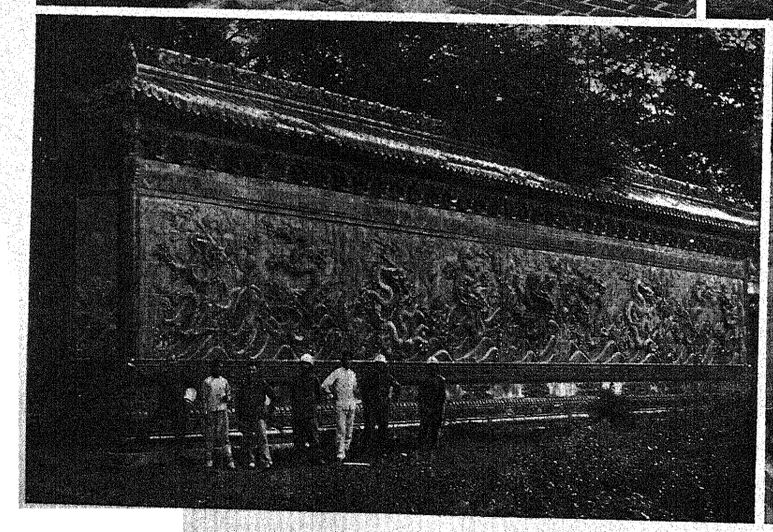
However it was not in architecture, which demands an ardent creative impulse, that the people of the Far East revealed their greatest genius. The speculative and resigned philosophy of Confucius led rather to the study of nature itself. Without desiring to penetrate the great mystery of the universe, he felt an infinite sympathy for all humble creatures, his brothers in this fugitive apparition of a world. "One day I dreamed I was a butterfly", said the sage; "who knows if today I am not merely a butterfly dreaming that I am a man?" The earliest paintings often represent the picture of an ascetic sitting beneath a tree and contemplating in silent extasy the mist rising over a valley. Later the favorite subject is an almond branch agitated by the spring breeze (Plate XXVII), or a bird perched upon a reed singing in the dewy air. The moist atmosphere is charmingly suggested by transparent masses of color. One school succeeded another under the passing dynasties, and even the emperors themselves were sometimes artists of repute. Many of the monks were painters, and their pictures are an expression of their religious sentiments. At the end of Eighth Century a Japanese monk who was also a painter speaks of the training he had received in China. "The master", said he, "taught me that the mysteries of the faith cannot be transmitted without the aid of

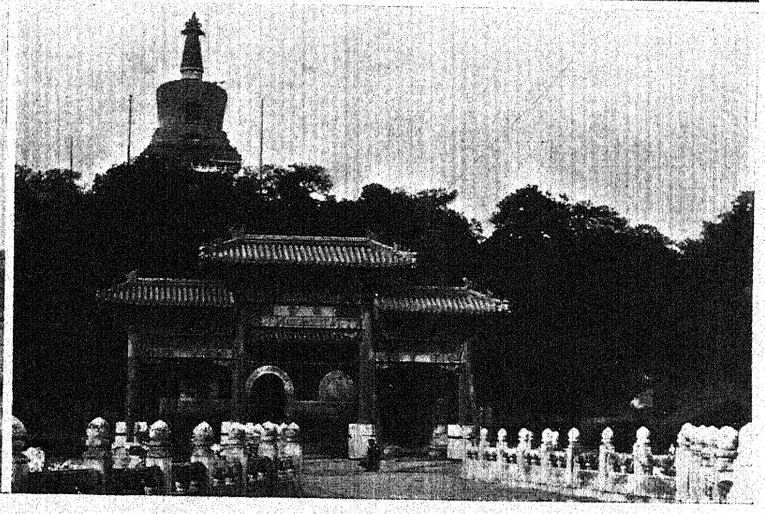












Corea. 1. Monumental gateway at Seoul. – *Japan.* 2. Colossal statue of Buddha, the largest known. It is of bronze and is near Yokohama. *(Photo by Hutin.)* – *China.* 3. Entrance to the Imperial Palace at Peking. *(Photo Underwood.)* 4. Pagoda at Yeol. – 5. Temple near the tombs of the Mings. *(Photo Geare.)* – 6. Pagoda and park of the Emperor Hsuan-Tung, later the pleasure grounds of the Mongol Emperors. *(Photo Geare.)* – 7. The famous porcelain wall at Peking. – 8. Gate of Tsien-Min at Peking. One of the gates of the Great Wall near the Bridge of the Beggar; burned in 1900 during the Boxer Rebellion and rebuilt in 1906. – 9. Interior of the Imperial Palace at Peking. View from the marble bridge.

Fig. 258. — Seated Buddha. Caves of Yun-Liang. China. *(Chavannes Expedition.)*

pictures. I therefore brought with me sixteen artists and taught them to paint the sacred figures."

Japan, therefore, learned from China the art of painting at a very early period. One of the first Japanese artists, Kanaoka, who lived in the Eighth Century, enjoyed in his time a reputation similar to that of the founders of the Italian schools of the Renaissance. Sesshu, a Fifteenth Century painter, was called to China to decorate the residence of the Emperor. On the ceiling of this palace he painted the sacred mountain of Japan, the volcano Fuji-yama. Japanese artists frequently represent this mountain in their landscapes; it is a perfect cone, an extinct volcano crowned with snow. Today our knowledge of Japanese art has corrected the impression formerly held that it was only second-rate.

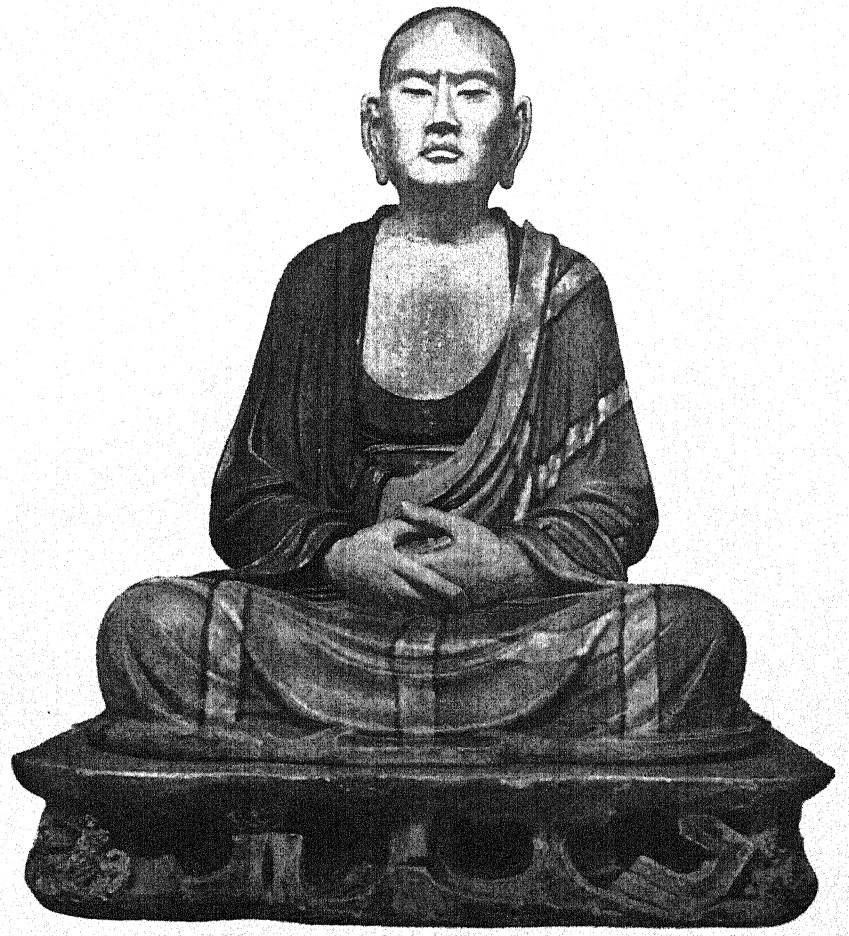
From this time on Chinese and Japanese painting developed along parallel lines, and during the long centuries of the Middle Ages they produced works of art that were far superior to contemporary European paintings. Indeed, they were entirely conscious of their superiority. Two Eighteenth Century Jesuit painters, Atiret and Castiglione, attempted to teach the principles of Italian painting to the artists of China, but they failed to arouse their interest. It is interesting to note the opinion held by Tsu-I-Kuei concerning the work of these Jesuits. In his *Observations on Painting* he says: "The Occidentals are fond of giving their pictures perspective, and nothing could be more correct than the effect they produce of depth and reality. Figures, houses and trees cast shadows as in nature itself. Their mural paintings of palaces and houses seem so real that one almost wants to walk into them. While their work shows great skill in

Fig. 259.— Procession of Buddhist monks. Caves of Lung-Men. CHINA. *(Chavannes Expedition.)*

draftsmanship and execution, I would hardly go so far as to class it as veritable painting."

What, then, are the fundamental principles of the art of these Chinese and Japanese painters who deny even the name of painting to the work of the artists of the Occident? In the first place it is a spiritual feeling for the symbolic which they strive to bring out in everything they paint. Rarely do they attempt to represent nature as if it were entirely wanting in the sentiments which inspire mankind. Rocks rise as if aspiring to perfection; trees wave in docile obedience to the wind; water flows as though it were conscious of its mission to refresh and purify. A Chinese artist can scarcely conceive of a landscape without water; the very name of painting in Chinese is formed of the two syllables meaning water and land (figs. 268 and 269). Animals, too, seem capable of a feeling for the good and beautiful. An eagle, seemingly lost in deep thought, rests in the coolness of a waterfall; a tiger becomes

Fig. 260.— Buddhist head of Khotan. *(Stein.)*



One of the Lo-Han, or sixteen companions of Buddha.
Chinese porcelain from the caves of Ichu. Tang dynasty.
Larger than life size. *(British Museum.)*

Figs. 261 and 262. — Chinese portrait heads. Ming period. *(Royal Ontario Museum.)*

a symbol of moral strength (fig. 267); a swan gracefully sways amid lotus blossoms; or a playful cat craftily prepares her defences against a dog.

Like all other creatures, man, too, seems animated in these landscapes by his moral principals and his sentiments. Often the personages are pilgrims in search of truth who come by night to the hut of a hermit, the lights of which gleam in the midst of a tempest which symbolizes the tumult within their own souls. But although he never loses sight of the moral forces which rule mankind, the Chinese artist is also capable of painting domestic scenes, portraits and even caricatures.

Pictures of this sort, however, have always been regarded as second rate, and no artist painted them as a regular thing until about the middle of the Eighteenth Century, when Hokusai, a great Japanese painter, began to specialize in this class of work. He painted a series of one hundred views of Fuji-yama showing the sacred mountain as it is in each season of the year and at every hour of the day. We see it in a mist (figure 271), in the falling rain and even through the mesh of a fisherman's net. Hokusai's talent for painting was simply marvelous, and his ardent

Fig. 263. — Portrait head of an empress. Ming period. *(Royal Ontario Museum.)*

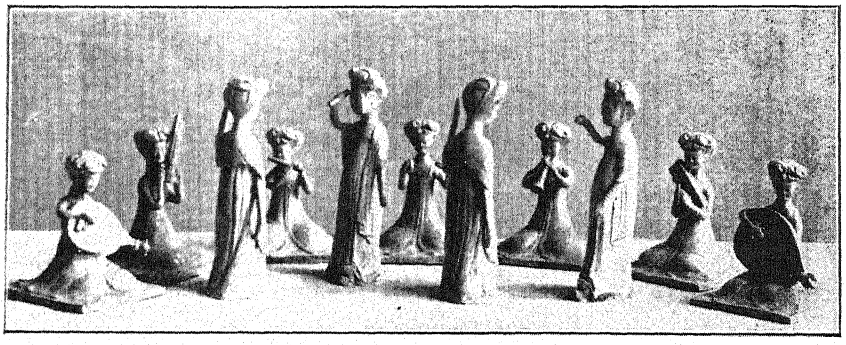


Fig. 264. — Terra-cotta musicians and dancers from a tomb of the Tang period.

creative passion never gave him any rest. He continued to work up to the day of his death and could never resist carrying out every impulse of his extraordinary spirit. In his later years he signed himself "an old man whose mania for painting will not permit him to cease". Indeed, his genius is one of the happiest which has ever blessed mankind. We see in Hokusai the latest phase of Oriental painting, a popular naturalism which turns with preference to anything pertaining to the lower classes, especially group scenes: people crossing a bridge, a street quarrel, laborers at work, a shop or children at play.

Fig. 265. — Terra-cotta horse from a tomb of the Tang period.

As a matter of fact, the art of the Far East never loses this sympathetic feeling for the lower classes. It is fraternal and affectionate and resembles the sympathetic treatment of plants and animals already latent in the early philosophical schools of Chinese art. It is to this trait that we are indebted for the lacquer and bronze ornaments from Japan and China which represent animals in a state of surprise; they almost seem to feel the caressing hand of the artist.

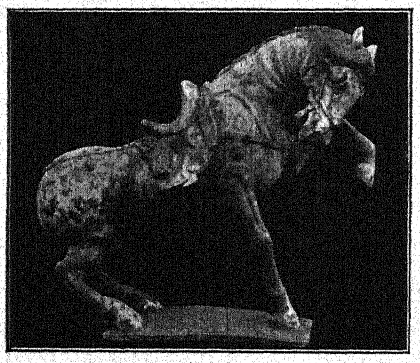


Fig. 266. — Terra-cotta horse from a tomb dating from the period of the Tang dynasty.

The artistic culture of the Far East has, to a certain extent, penetrated our own Occidental world and has insensibly brought into our life a new and different feeling for life. The animals

Fig. 267. — Tiger by Chen-Chu-Chung.
(British Museum.)

Fig. 268. — Landscape. Ming period.

of Greek art have this almost human quality; the horses of the Parthenon seem animated with an intelligence like our own, but in the painting and sculpture of China and Japan we feel the divine spark in nature itself with all its infinite variety.

When the Oriental artist copies a plant, every leaf is outlined or painted with an individuality all its own. Long before our modern school of impressionism, the Chinese and Japanese artists were satisfied to paint the color of a single cloud and the iridescent tones of the mist. Even in the most unimportant details they displayed the same love and vision for the unity of nature. The first of the six rules for painting laid down by Sie-Ho at the end of the Fifth Century prescribes above all the expression of "the spiritual element

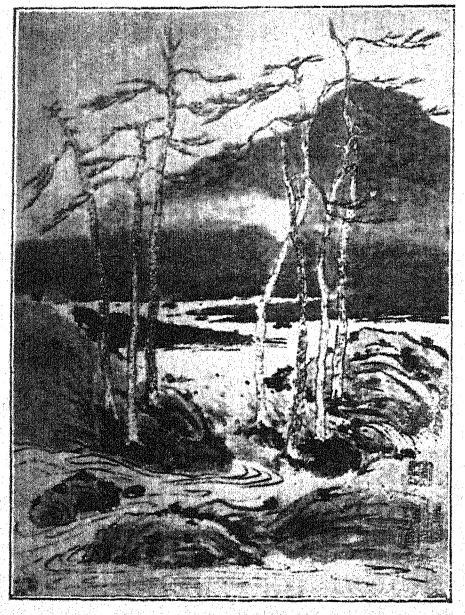


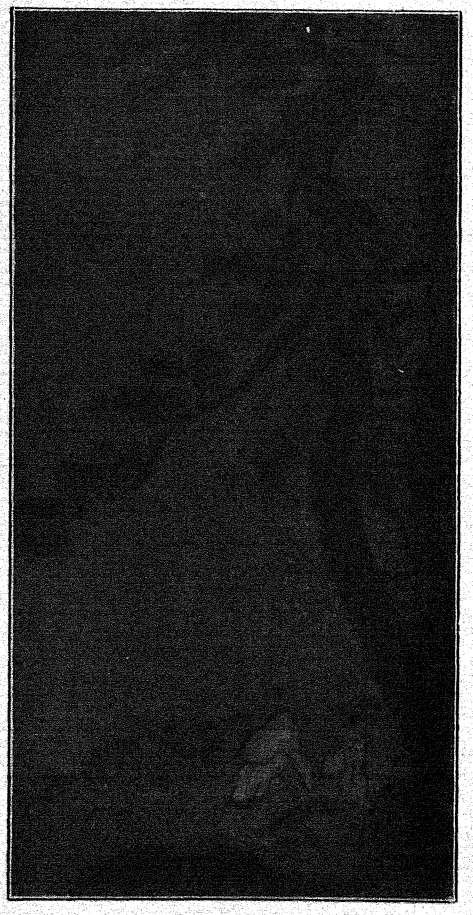
Fig. 269. — The seven pines. Chinese painting. Tang period. *(New York Museum.)*

of life". From the rather obscure language of this writer we gather that this is to be attained by representing the movement characteristic of every creature, whether animal or plant. The second rule is to see into the structure of every organism (he calls it the "law of the bones") and express it through the medium of the brush. Thus the Asiatic artist is expected to express life as whole and to look into every living being, catching its spirit from its movements and its inner structure from its outer form.

Japanese architecture also follows the Chinese model. The nature of the volcanic rock of these islands has changed somewhat the appearance of the buildings, and their walls are built of great polygonal blocks of stone above which rise the upper stories. The latter are of wood and covered with lacquer and gold. Only a few of their great national sanctuaries can be compared with the great temples of the Occident. They usually chose spots where the view was imposing. Here they cut into the mountain and leveled off the platform where they set up the gates and sacred enclosures.

Unlike China, the religion of Japan required temples for collective worship. The Shinto cult of ancestors and deceased emperors became merged with the worship of Buddha, and we find in the Japanese temples huge figures of the latter cast in bronze; indeed, some are of colossal size. Characteristic of the Japanese temple is the fantastic landscape; this has not only been preserved, but even exaggerated in the surrounding groves and in the waterfalls which plunge down the mountainside below the temple. The builders of the national temples of Japan are great landscape-gardeners like the delightful French architects of the school of Le Nôtre or the constructors of the Italian villas of the Renaissance. It is strange that the great temples have never been properly studied. Even Gonse's great work, *L'art japonais,* only describes them in vague terms without either a plan or an analysis of their construction. The backward state of our knowledge of the Far East is surprising, except for painting. Here a very genuine interest has been displayed by the students of Europe.

Domestic architecture in Japan is extremely simple. Private homes and even royal palaces are composed only of a tiled roof supported by the necessary columns and beams. The walls are of wood and the interior partitions of paper. Bamboo screens are also extensively used.



The wise man contemplating the world.
(Chinese painting by Ma-Yuan, xiiith century.)
(Mitsuoki Collection.)

Mountainous landscape by Sesshiu,
the first great Japanese painter (xvth century).
(Nagashighe Kuroda Collection.)

Flowering plum branch in the wind.
(Chinese painting by Lou Fou. xvth century.)
(Taha-Kazu Collection.)

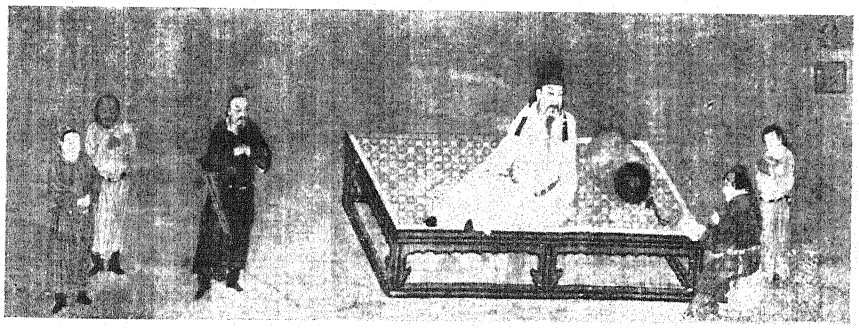


Fig. 270. — Instruction of Nui-Tsung (1101-1125 A.D.) *(New York Museum.)*

Wholly given over to a fanciful contemplation of natural forms, Japanese art has accomplished marvels in the production of small ornamental objects decorated profusely with leaves, birds and butterflies. In the exquisite bronze sword-guards we see the inexhaustible imaginative resources of the metal-workers of Japan (fig. 272). This was a famous industry; the old warrior clans of Japan had an overmastering passion for the decoration of their weapons. These guards, which were set on the hilt of the sword, could be easily changed, and in them we find some of the most graceful patterns of Japanese art. The taste displayed in these reliefs seems so modern in character that one could readily believe them to be the work of contemporary European artists.

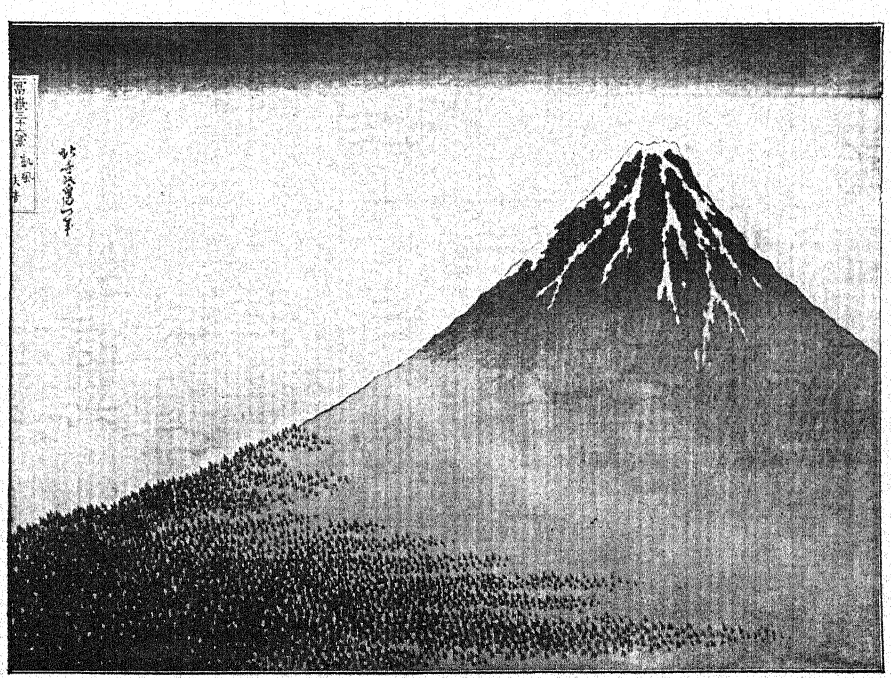


Fig. 271. — Japanese chromotype by Hokusai. 1820. (One of the hundred views of Fuji-yama.)

Summary. — Greek art was introduced into India at the time of Alexander's invasion of that country. Coinciding with the period of the spread of Buddhism, it produced a Greco-Buddhist art which represented subjects associated with the new religion, but which took root only in the north of India. The remainder of India finally succumbed to the old Brahman traditions and its sculpture and architecture is characterized by a more or less confused agglomeration of forms. It is to this Brahman art, somewhat influenced by the Greco-Buddhist school of the north, that the temples, pagodas and sculptured caves of India belong. From here it spread into Indo-China, inspiring the construction of the temple and palace groups at Angkor. Greco-Buddhist art, however, was introduced into China by way of Chinese Turkestan in the First Century A.D. China was soon converted to Buddhism, forsaking the tenets of her own native art, but retaining more less of its spirit. The Greco-Buddhist art of China is more methodical; here we do not see the confused massing of figures which we find in India. The philosophic and contemplative trend of Buddhism and Confucianism did not inspire great monumental works. The art in which the Chinese surpassed was painting, and their methods and technique in this branch were introduced into Japan.

Bibliography. — JAMES FERGUSSON: *Monuments of Central India,* 1886. *Cave temples in India,* 1880. — GRÜNWEDEL: *Buddhist art in India.* 1901. — A. FOUCHER: *L'art gréco-budique du Gandara,* 1905. — *Archaeological Survey of India,* 24 vols. — *L'art kmerr,* Gazette des Beaux Arts, 1904. — JOHN ANDERSON: *Catalogne and Handbook of the Archaeological Collections in the Indian Museum,* 1883. — GENERAL L. DE BEYLIÉ: *L'architecture Hindoue en Extrême Orient,* 1907. — ALBERT GRÜNDWEDEL: *Buddhistische Kunst in Indien.* 1900. — VINCENT A. SMITH: *A History of Fine Art in India and Ceylon,* 1911. — K. OKAKURA: *The Ideals of the East,* 1903. — F. PERZYNSKI: *Hokusai,* 1904. — For a general survey, see O. MÜNSTERBERG: *Chinesische Kunstgeschichte,* 1912. — E. CHAVANNES: *Mission archéologique dans la Chine septentrionale,* 1909. — A. STEIN: *Ruins of Desert Cathay,* 1912. — R. PETTRUCCI: *Les caractéristiques de la peinture japonaise,* 1907. — *La philosophie de la nature dans l'art de l'Extrême Orient,* 1911. — L. BINYON: *Painting in the Far East,* 1908. — S. W. BUSHELL: *Chinese Art,* 1904. — H. YULE: *The Book of Sir Marco Polo,* 1902. — L. GONSE: *L'art Japonais.* — JOHN FERGUSSON: *Outlines of Chinese Art,* 1899. — A. GILES: *An Introduction to the History of Chinese Pictorial Art,* 1905. — B. LAUFER: *Jade,* 1918. — L. R. HOBSON: *Chinese Pottery and Porcelain.* — E. FENOLLOSA: *Epochs of Chinese and Japanese Art,* 1912. — A. STEIN: *Sirinda,* 1915.

Periodicals. — *Revue Asiatique,* Paris. — *Orientalisches Archiv,* Leipzig. — *Deutsche Orientgesellschaft,* Leipzig. — *Burlington Magazine,* London. — *Journal Asiatique,* Paris. — *Annales du Musée Guimet,* Paris. — *Ostasiatische Zeitschrift,* Berlin. — *Revue des arts asiatiques,* Paris.

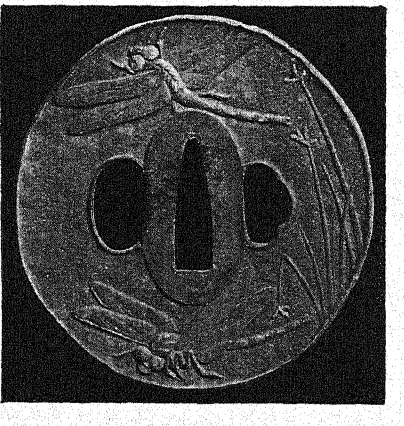


Fig. 272. — Japanese sword-guard.

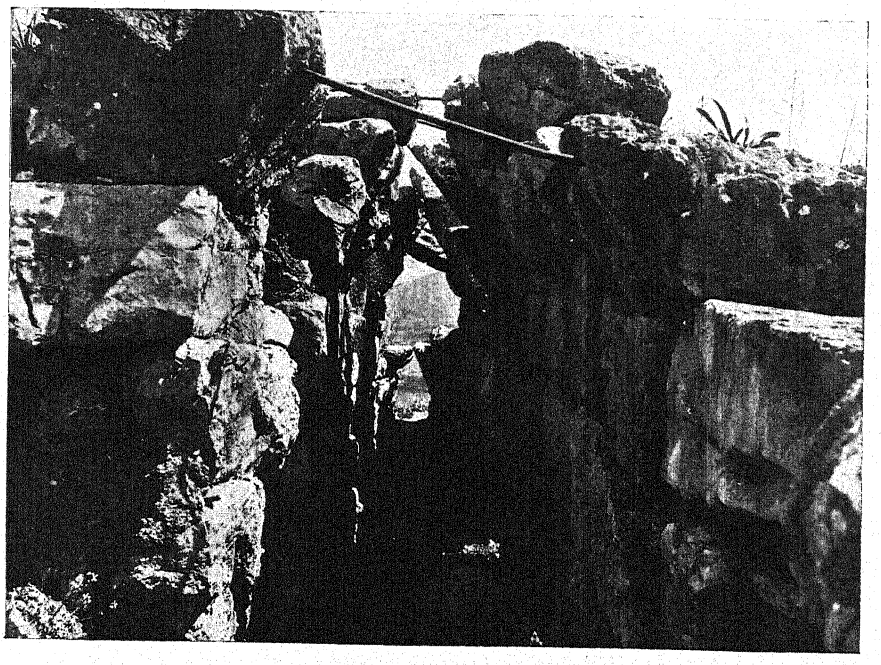


Fig. 273. — Casemates or corridors in the walls of Tiryns.

CHAPTER XI

THE HISTORY OF CLASSICAL ARCHAEOLOGY. — PRE-HELLENIC ART. TROY. — EXCAVATIONS AT MYCENAE AND TIRYNS. — THE PALACES OF CRETE. PAINTING, SCULPTURE AND GOLD WORK.

To study the history of Greek art is to study the history of the art of all mankind", said Winckelmann, the founder of classical archaeology. In this sentence is summed up the intense and exclusive interest so long inspired by the art of Greece and Rome. At the beginning of the last century the Orient was practically an unknown field, and the same might be said of Egypt. Greek art, therefore, was not only the best, but the only art. All the other nations known to the ancients were barbarians, and their art was considered to be inferior beyond measure to that of Greece and Rome.

This was Winckelmann's opinion, and it was very generally held for a considerable period. Yet, in spite of its wide acceptance, little enough was known even of classical art. Greece was still a Turkish province, and the country was closed to the archaeologist. The only material for study was that dug from the soil of Italy which had furnished the principal collections of Europe. Among these were numbered the Papal collection in the Vatican, the Roman municipal museum in the Capitol and the Neapolitan collection of bronzes and marbles from Pompeii and other parts of southern Italy. Prominent also were the collec-

Fig. 274. — Archaeological map of Greece.

tions of the princes of Florence and Parma who were noted for their love of ancient art and, at times, kept agents permanently at Rome in order to acquire antique statues. Except for a few statues from Provence, the galleries of the kings of France were supplied from the same source, and the collections of Germany and Spain had been acquired in Italy either by purchase or through matrimonial alliances of the royalty and nobility of those countries with members of the Italian aristocracy. Nothing was known of the authentic Greek originals of these pieces which were, for the most part, merely Roman copies; and even these were scarce and widely scattered. Such was the material from which Winckelmann reconstructed a series of sculptural types among which he attempted to identify a number of the famous statues of antiquity mentioned by classical writers. Winckelmann's literary preparation for this work was excellent. Though of humble origin, he lived only for his work and was an enthusiastic admirer of the civilization of Greece and Rome. Aided by the Papal Nuncio at Dresden, he was enabled to leave Germany and go to Rome where the friendship and protection of Cardinal Albani secured for him the important post of Papal Antiquary. In his two great works, *History of the Art of Antiquity* and *Monumenti antichi inediti*, written about the middle of the Eighteenth Century, he defines the iconography of the gods and other classical types and points out the most prominent characteristics of the various schools, often hazarding a conjecture as to the identity of the sculptor of the work under discussion.

After his death the work of classification was continued at Rome. In 1823 a group of art critics from various countries, among them Gerhardt and the Duc de Luynes, founded the international Institute of Archaeological Correspondence, which became a centre for foreign students of classical antiquities. As time went on, German preponderance, Prussian subsidies, and the withdrawal of the French, who did not wish to collaborate with the German group, resulted in the foundation of the present German Archaeological Institute. The French School was established, and other nations began to have their own schools at Rome. After Greece achieved her independence, similar archaeological institutes were established at Athens.

Up to recent years Greece was the least known country in Europe. During the Middle Ages Athens was a small Byzantine city at which European envoys sometimes stopped on their way to Constantinople. The first of these curious travellers was Cyriac of Ancona, who gives an account of this city as it appeared

in the Fifteenth Century. When the Almogavares occupied the Acropolis in the Fourteenth Century, one of the kings of Aragon seemed to be aware of the importance of these ruins, but these were exceptional cases. It was only in the Eighteenth Century that travellers began to take some notice of the ruins in Greece and make rough sketches of them as they appeared at that period. None of the savants of the Renaissance set foot upon the soil of Greece. Their vague knowledge of its monuments was derived principally from the Greek and Roman writers of antiquity.

By the beginning of the Nineteenth Century, however, the antiquities of Classic Greece had begun to attract the attention of students. The first sculptures to arouse admiration in Europe were the marbles from the temple of Aegina. They were transported to Zante by an antiquary and they were purchased by the King of Bavaria, restored and sent to his collection at Munich. Soon after, Lord Elgin, the British envoy to Constantinople, took from the Acropolis the greater part of the Parthenon marbles, a caryatid and a column from the Erechtheum as well as a large number of inscriptions. These beautiful examples of Greek art astounded Europe. Canova went to London to see them and expressed the wish that he might be born again to commence anew his career as a sculptor.

A methodical exploration of the soil of Greece gradually began. The first official expedition was that of Blouet who took advantage of the occupation of the district of Morea, which still belonged to Turkey, to study and sketch the temples of the Peloponnesus. Two English architects, Stuart and Revett, had already made plans and drawings of the various famous ruins. The first excavations on a large scale were those begun in 1875 by the Germans who undertook the laborious task of uncovering the temples of the national sanctuary at Olympia. This was followed by the French exploration of Delphi, and later of Delos; while the Germans, who had finished their work at Olympia, began excavations at Priene and Pergamum. The Austrians explored Ephesus; the Americans, Argos and Sardis; the British, Corinth; and the Greeks themselves made excavations on the Acropolis of Athens, at Eleusis and at Epidaurus.

All these excavations brought to light great numbers of Greek statues and monuments, the existence of which was not even suspected in Winckelmann's time. The works of the various schools of art have been identified with ever increasing confidence, and a definite knowledge has been acquired of the types of the most important works and of the characteristic style of each of the great masters of sculpture. Even works of inferior merit have been placed in the general panorama of the development of Greek art.

But until recently a certain amount of mystery hung about the origin of Greek art. Nothing was known of a stone age in Greece nor of any prehistoric monuments other than the massive walls composed of huge blocks of stone known as Cyclopean or Pelasgian. The Greeks believed them to be the work of the original inhabitants of the country who were called Pelasgi. It is surprising, nevertheless, to find how accurate were certain vague beliefs of these people concerning their origin. They were disguised, it is true, in the form of myths and legends, such as those of the Labyrinth and the Minotaur, Minos, Daedalus,

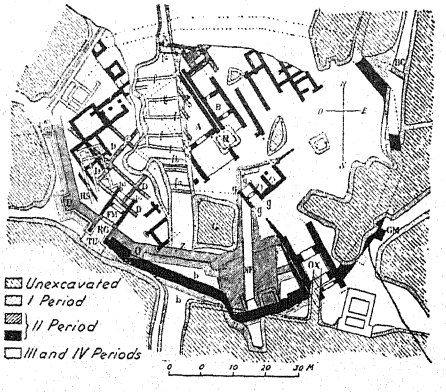


Fig. 275. — Plan of Troy. *(Schliemann.)*

and others contained in the so-called Homeric poems. Aside from these myths, they had no positive historical knowledge of their origin. Even Herodotus knew nothing of the period which we call pre-Hellenic because it preceded the development of Greek civilization which began in the Ninth Century B.C. Somewhere about the year 1000 B.C., Greece suffered an invasion of foreign peoples which caused its artistic culture to retrograde to a degree that is difficult to understand. It might almost be said that in the Tenth Century the civilization of the country was compelled to begin all over again. From this period it was possible to trace the development of Greek art in complete ignorance of what had gone before; and it is only in very recent years that we have gained a knowledge of the ancient civilization that preceded it. To this older Greece and to its art and culture has been given the name, pre-Hellenic, or Aegean.

To begin with the prehistory of this country, some fifty years ago, the most ancient Hellenic settlement known to us was discovered on the island of Thera, in the Aegean Sea. This island, today called Santorin, is volcanic. A severe eruption, which the geologists say occurred in the second millenium before Christ, buried the homes and other possessions of the inhabitants, who were still living in the stone age. Houses and walls were covered with lava, but the classic Greeks knew nothing of this catastrophe. Their earliest recollection was the colonization of the island by the Spartans. Today, however, the primitive vases of Thera, unpainted and baked in the sun, are the starting-point for the chronological study of Greek ceramics. The houses of prehistoric Thera are divided into apartments, and the roofs were supported by central pillars, which were probably of wood.

The second stage, which is almost historic, is found in the lower strata of the remains of ancient Troy. Schliemann's exploration of these, and other similar remains at Mycenae and Tiryns, was one of the most sensational archaeological discoveries of the last century. Schliemann was not a professional archaeologist, but as a schoolboy in Germany he had conceived a profound admiration for Homeric Greece, which became the inspiration of his entire life. With his mind ever set on the heroes and cities of the Homeric epics, this poor boy went into business and amassed a fortune that he might turn his dreams into reality. He went to Greece where he uncovered the ruins of Mycenae, the home of Agamemnon, and Troy, the chief city of Asiatic Greece. He had the good sense to take with him a competent collaborator; the latter was a young architect named Dörpfeld, who was later to become the director of the German Archaeological Institute and who, after Schliemann's death, continued the exploration of this

ancient civilization already forgotten by the classical writers of antiquity.

Troy was a small walled city with gates and towers of rough stone and surmounted by an inner fortress constructed of crude brick strengthened by timbers. The city discovered by Schliemann was anything but the splendid city which he expected from the descriptions in Homer's poems. Even the palace was found to be a primitive affair. It was a simple structure composed of three buildings which really formed a single unit. The largest of these was in the centre and was the general assembly hall. In front was a sort of vestibule (fig. 275, A and B). The ruins believed to be those of Homer's Troy are marked on the plan in thick black lines.

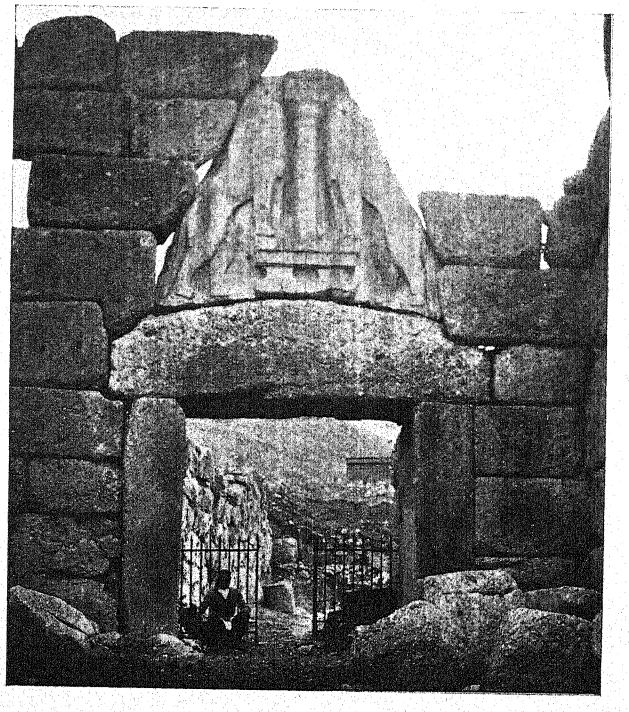


Fig. 276. — The Lion Gate. MYCENAE.

Beneath the walled city which Schliemann took for the Troy of Homer was another deeper layer containing the remains of houses. This, then, was an earlier, prehistoric Troy with stone implements and a type of pottery almost contemporary with that of Thera. Covered by a thick layer of decomposed vegetation, it is evident that this city of the stone age had been long abandoned when the second city was built upon its site; the Troy, which Schliemann believed to have been burned by the heroes of the Trojan War. The ground had been leveled and the surface terraced with a thick embankment at the rear. Walls and towers were constructed and this second Troy bears evidence of a certain degree of civilization. Many centuries later, Alexander built a Hellenistic city upon the mound of ruins, and the Romans made plans to establish a colony of their own upon the spot in memory of their reputed ancestor, the Trojan Aeneas. We see, therefore, in a cross-section of this mound of Trojan remains, excavated by Schliemann, a graphic outline of the complicated history of Greece down to the time of the Roman Conquest.

Today it is generally believed that although Schliemann really did explore the site of ancient Troy, he was mistaken in ascribing to the Homeric city the deep second layer of archaeological remains. Homer's Troy was not nearly so

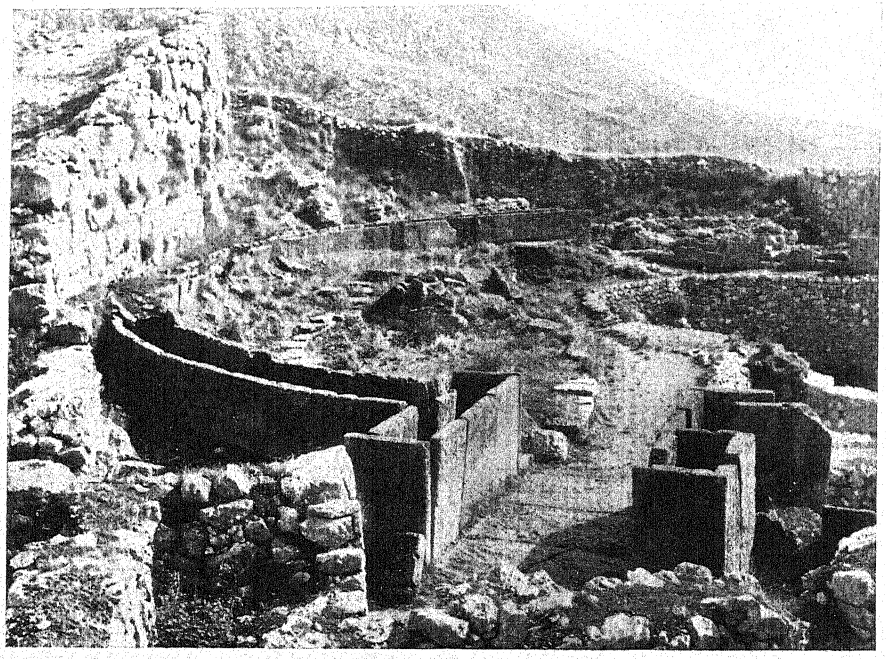


Fig. 277. — Open space called the agora and the excavated royal tombs. MYCENAE.

ancient and was to be found above these remains as Dörpfeld has successfully demonstrated in later excavations. The same thing occurred at Mycenae, the city of Agamemnon who led the Greek warriors at the siege of Troy according to the Iliad. The site of Mycenae was well known; the ancient Greeks described its walls and its abandoned enclosure just as they were found in 1880 when Schliemann began his excavations. Pausanias tells of these ruins and of the fortress of Tiryns, saying: "There are still to be seen some remains of the walls and the gate which has lions over it. These were built, they say, by the Cyclopes who constructed the walls of Tiryns for Praeteus." Again: "Among the ruins of Mycenae is the fountain called Perseia and the subterranean chambers where Atreus and his sons stored their treasures."

Two thousand years later the remains to be seen on the site of Mycenae could still be summed up in the few words of Pausanias' account of the so-called Treasury of Atreus and the city gate (fig. 276).

This is all that was known of Mycenae and its art down to the time when Schliemann began to excavate. The treatises of forty years ago could do no more than describe the ancient walls with their massive foundations which Pausanias supposed were built by the Cyclopes, the gateway with its strange relief of lions facing a column and the subterranean chambers. Mycenae was set on a plain, and its enclosure must have defended a city, so far as we can see from the remains within the walls. Schliemann with his army of laborers spent a number of seasons exploring the acropolis and was so fortunate as to discover at the outset a series of tombs which still contained human remains; these he

believed to be the sepulchres of Agamemnon, Clytemnestra, Aegisthus and other members of the family of Atreus (fig. 277). The bodies had been buried together with their jewels; nowhere has gold been found in such abundance as in these Mycenaean tombs. Homer speaks of this city as rich in gold and says Atreus and his sons were noted for their wealth.

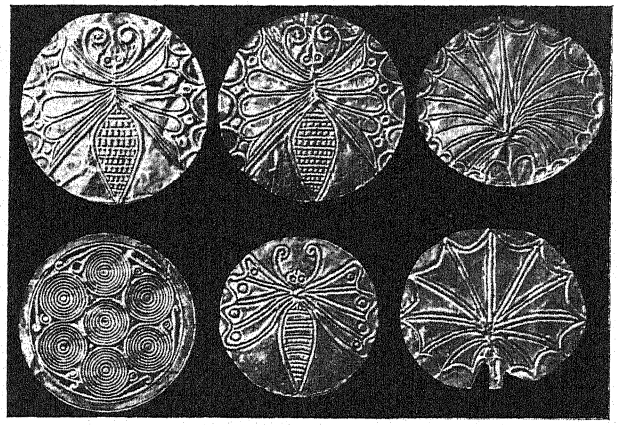


Fig. 278.—Personal ornaments found with the bodies in the royal tombs. MYCENAE.

The faces of the persons found in the graves upon the acropolis appear to have been covered with gold masks; pectorals of the same metal lay upon their breasts; and diadems, rings and vessels, all of gold, were found about the bodies (fig. 278). Schliemann might well say that he picked up gold by the handful. His finds at Mycenae alone were sufficient to fill a small museum built on the Acropolis of Athens, the most sacred spot on Greek soil. This collection has recently been transferred to the National Museum.

These tombs were found in a strange place. They lie in the part of Mycenae which Schliemann called the *agora,* or open space, because he found it surrounded by a circular bench where he supposed the council sat at public assemblies (fig. 277). When he excavated this circular space, he discovered, not only the tombs, but also a number of stelae which must have been set up in the ground originally (fig. 279). Schliemann was also able to identify the ruins of the royal palace at Mycenae. In it he found a rectangular hall divided by columns similar to the principal apartment of all the palaces of this period. This has been given the name of *megaron.*

Fig. 279.—Stela from the royal tombs. MYCENAE.

Nevertheless, his exploration of the interior of the city was more or less superficial. Schliemann was not a trained archaeologist, but

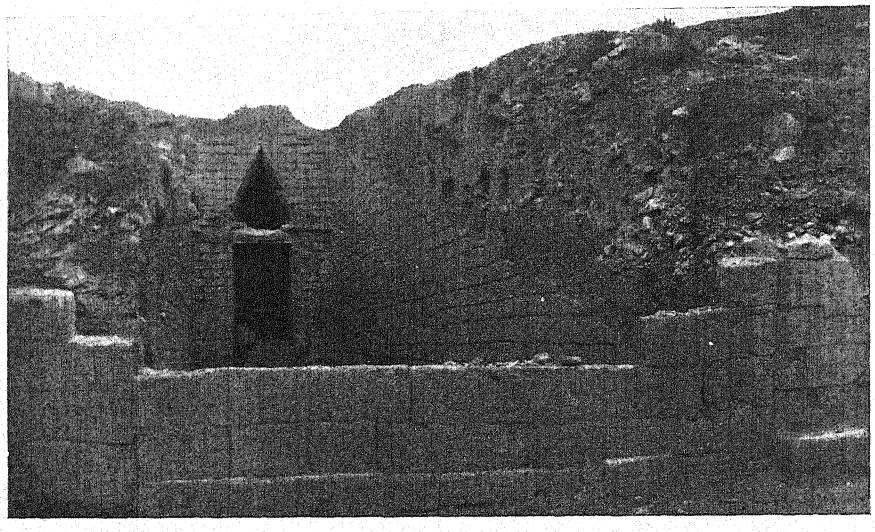


Fig. 280. — Corridor and entrance of a burial chamber. MYCENAE.

rather a fortunate amateur, and was always anxious to push on new fields. He explored in haste only the sepulchres or "treasuries" mentioned by Pausanias which would naturally be expected to be empty.

The latter are outside the walls. Their arrangement suggests the existence of an earlier method of burial than that indicated by the tombs on the agora inside the city. They were burial chambers somewhat similar to those found in the dolmens and consisted of a large circular hall for religious purposes with a small adjoining chamber to contain the body. An outer passage led to the hall. These domed structures were not scarce; a tomb identical with the Treasury of Atreus was discovered by Schliemann's wife who accompanied her husband on his expeditions (fig. 280). The ruins of other similar tombs have been found in the neighborhood of Mycenae, although they are not so large. They are always circular and the dome is composed of projecting courses of stone, not the standard construction of wedge-shaped blocks bearing upon and supporting one another. It is a more primitive and simpler structure than the vaulted dome with which we are all familiar, but it has long been known from travellers' descriptions, and its use here gave rise to the theory that the Greeks were unac-

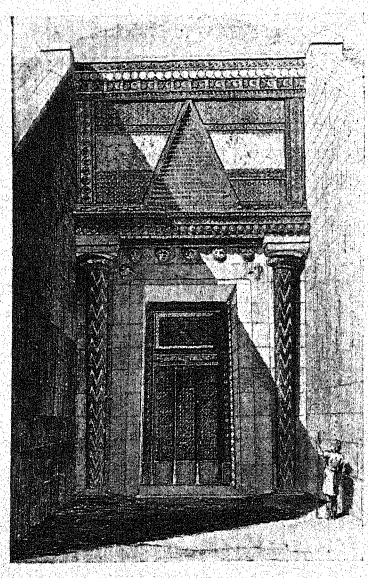


Fig. 281. — Entrance to a Mycenaean tomb. *(Perrot and Chipiez.)*

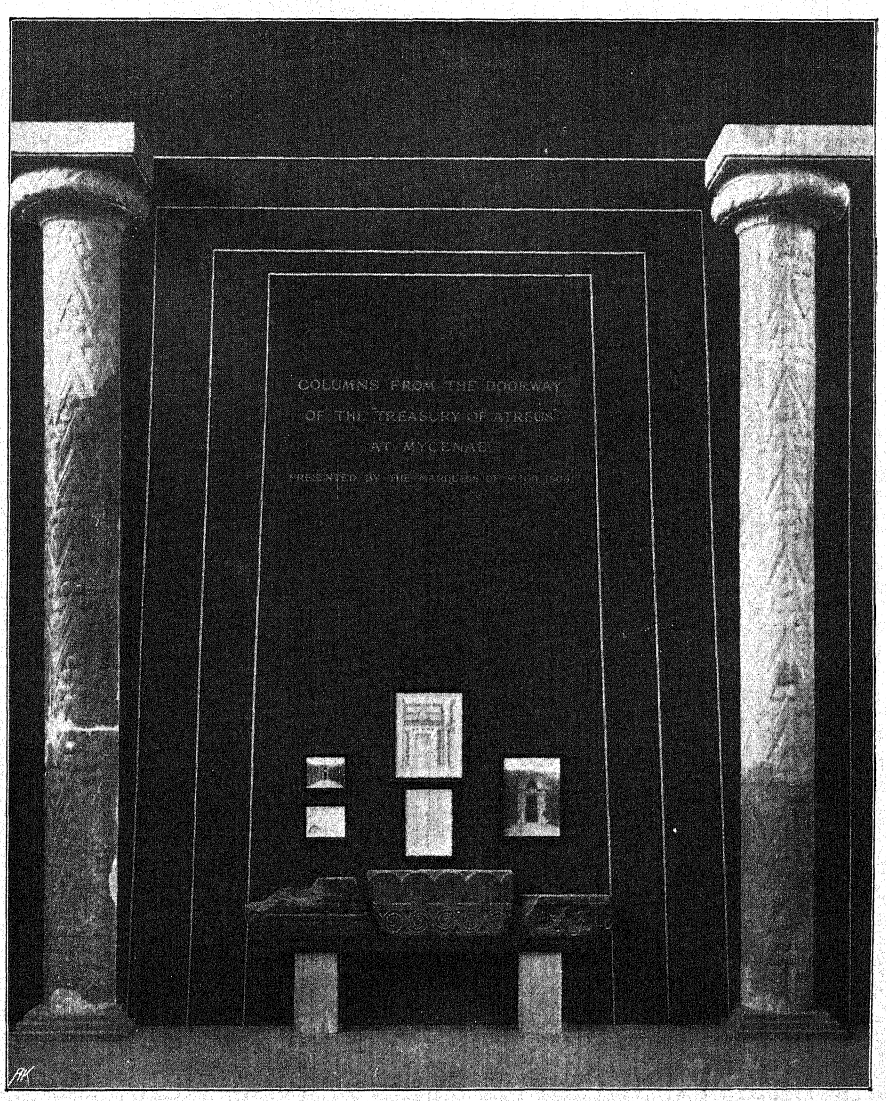


PHOTO W. A. MANSELL & C.

Column from the entrance to the Treasury of Atreus. MYCENAE. *(British Museum.)*

quainted with the real vault. Today, however, it is well known that the Egyptians and all the nations of Western Asia were familiar with the vault, and it is impossible that the Greeks should not have known of it from pre-Hellenic times, for they were in constant communication with both Egypt and the peoples of the Orient. The Greek preference for lintels and straight lines should be ascribed to taste and choice rather than to an ignorance of the technique of the vault.

The same technique of horizontally projecting courses of stone is also seen in the doorways. It is intended to lighten the weight bearing upon the lintel. We see it in the Lion Gate, where the triangular space thus formed has been filled with a sculptured relief (figure 276). There is a similar triangular opening above the doors of the "treasuries" which may have been left in order to light the interior (figs. 28c, 281 and 282).

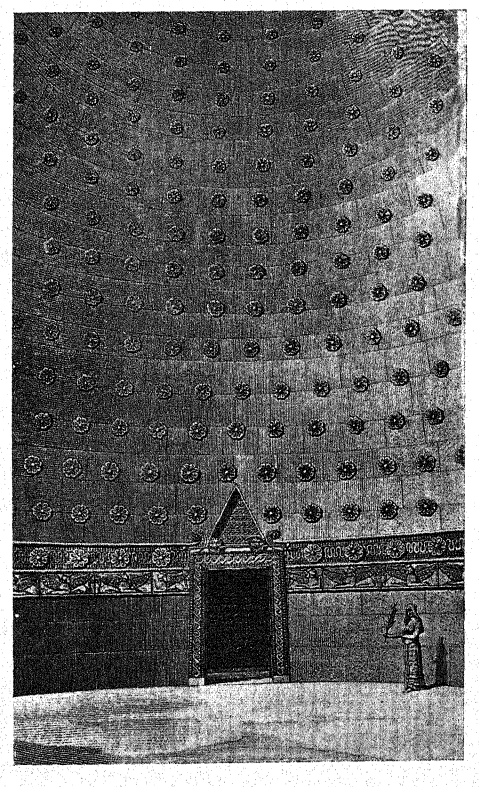


Fig. 282. — Hall of a Mycenaean tomb. *(Perrot and Chipiez.)*

Recent discoveries in this field have again called attention to certain architectural and ornamental features of the doorway of the Treasury of Atreus which had been carried to England. These fragments of columns and friezes were donated by Lord Sligo to the British Museum, where the entrance to the tomb has been restored in part. (Plate XXVIII.) We reproduce in figure 281 a reconstruction by M. Chipiez showing the remarkable façade of the entrance leading to the large hall.

Circular tombs of this type are constantly being discovered in various parts of Greece, in the Aegean Islands and among the ancient Greek settlements of Asia. It is safe to say that if the excavation is sufficiently deep, no historic site can be explored without finding the remains of one or more of these tombs. They are easily recognized by their circular form, the character of the walls and the fallen stones of the pseudo-dome. In one of these "cupola-tombs" discovered at Orchomenus some of the bronze plates were still attached to the walls. These plaques have suggested the restoration of the Treasury of Atreus where the stones also show signs of having been covered by a casing (fig. 282). The door seen in the cut of the restoration is the one leading to the small lateral chamber which contained the body. In Crete the chambered tombs are sometimes rectangular, but they are always found to have been covered with this

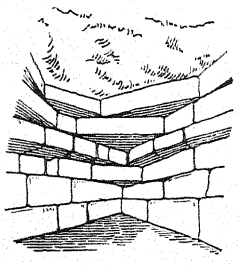


Fig. 283. — Remains of a pre-Hellenic tomb. CRETE.

pseudo-dome made by corbeling in the horizontal courses of the stone wall (fig. 283).

Burial methods appear to have changed at least three times during the pre-Hellenic period. We have already noted the pit-tombs excavated from the ground beneath the agora at Mycenae with their commemorative stelae and the "cupola-tombs", sometimes called the "bee-hive" type, approached by an entrance-passage. A third type of tomb has been found outside the walls at Mycenae where the lower classes lived by themselves grouped about the stronghold of their prince. This last method of burial was in terra-cotta coffins, or small sarcophagi called *larnax*. These are found in all the excavations of pre-Hellenic sites and are ornamented with paintings of axes, griffins, spirals and various geometrical designs. Like the stelae of the royal tombs, the decoration of these sarcophagi recalls the geometrical designs of the prehistoric art of Western Europe which must have exerted an influence upon Mycenaean culture at all times.

But in addition to these Western European themes we also find everywhere in the pottery, jewels and engraved stones of these people a new and original art which is plainly the mark of a state of mind, a spirit, very different from anything known in the world up to that time. Indeed, its very existence was unsuspected down to the time of the discoveries at Mycenae. It is difficult to define, but it seems very modern in some ways. These pre-Hellenic artists display a remarkable appreciation of forms in motion; an intense realism characterizes nearly all their work; and we note an unusually sympathetic treatment of certain of the lower forms of life such as fishes, mollusks and butterflies. But, strangely enough, they do not show that interest in the human form so characteristic of the Greek art of a later age. The publication of Schliemann's book on Mycenae created the most profound

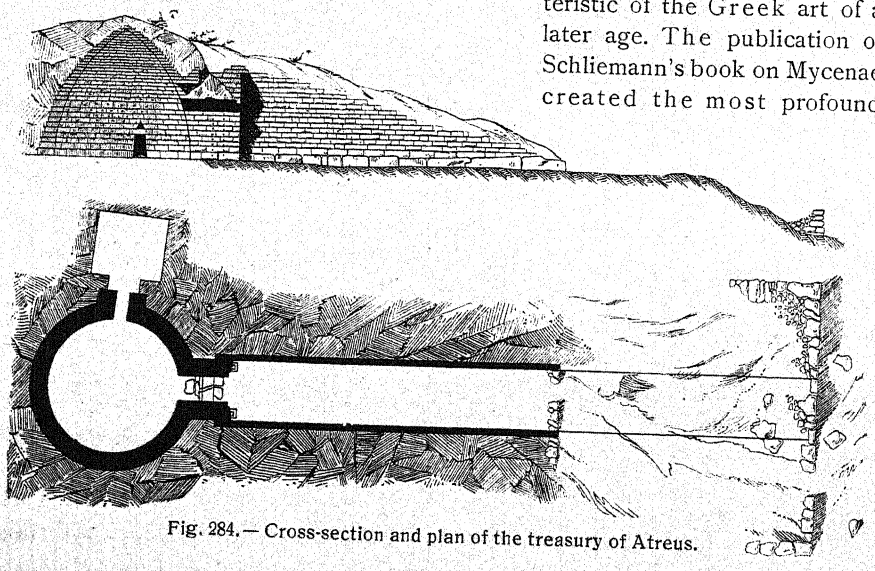


Fig. 284. — Cross-section and plan of the treasury of Atreus.

astonishment. This was not the Greece known to the world through the medium of classic art and literature. Some sceptics regarded the jewels from Mycenae as frauds or, at least, the work of the Byzantine period. Not only was the style different, but it contradicted all the fundamental principles of Greek art. But one discovery followed another until it was impossible to deny the evidence. Leaving Mycenae, Schliemann spent much money on the exploration of Tiryns, a pre-Hellenic fortress described by Pausanias, as well as Argos and Nauplia, two other cities mentioned in the Homeric epics. The work was continued by Dörpfeld at Pylus, by the English in Sparta and by the Greeks at Orchomenus

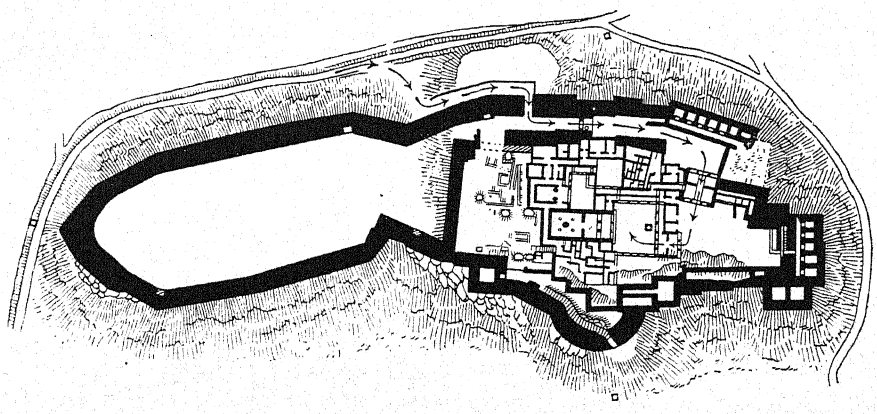


Fig. 285. — Plan of the acropolis, or fortress, of Tiryns. *(Schliemann.)*

and Vaphio. Even the Acropolis of Athens was found to be the site of a pre-Hellenic fortress.

The best example we have of these fortified palaces is the acropolis at Tiryns (fig. 285). The summit is reached by an inclined road, or ramp, along the walls of polygonal blocks of stone. An opening in the wall leads through a vaulted passage to the main gateway which is like a propylaeum, for the actual gate is approached on either side through a vestibule, or porch, supported by two columns. Surely this is the prototype of the Greek propylaeum. Passing through a large outer court, the visitor turns to the right and through a smaller propylaeum into the main court. Here is the altar for domestic worship and the entrance to the *megaron*, or assembly hall. This is approached through a porch supported by two columns and an inner vestibule. The roof of the great hall was supported by four columns, probably of wood, the bases of which are still to be seen on the floor, and in the centre of the apartment was the great hearth. Another smaller *megaron* opens on another court and was probably the women's quarters. Behind these were other subsidiary rooms, the uses of which are not known. The chambers set into the thick outer walls may have been either casemates or store-rooms (fig. 273).

At one end of the citadel of Tiryns is a prolongation of the fortified enclosure in which Schliemann dug only a single trench lengthwise. Here were probably the servants' quarters.

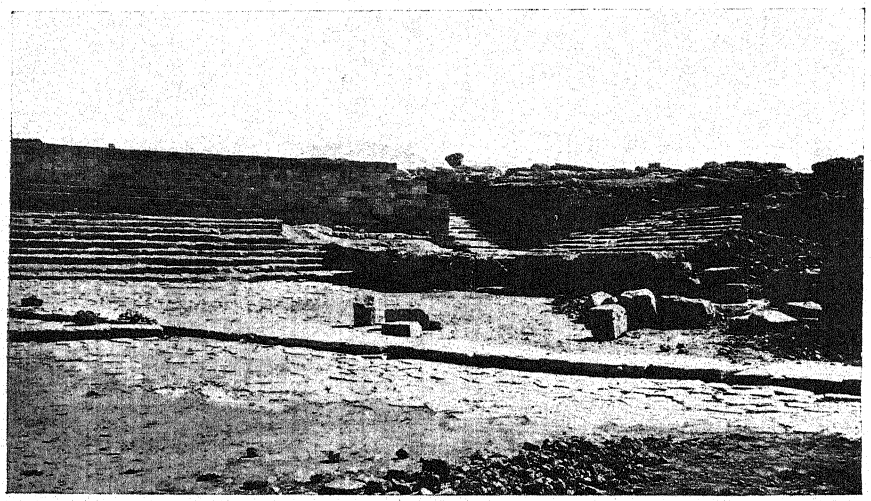


Fig. 286. — Court of the palace at Phaestus. CRETE.

The pre-Hellenic citadel at Tiryns was the only palace where the ground plan was uncovered prior to the discoveries in Crete. It had been completely abandoned at a very early period. Consequently, its exploration aroused great interest, for it had evidently been the residence of one of the most powerful lords of prehistoric Greece. But its relative importance has diminished since the excavation of the great pre-Hellenic palaces of Crete in more recent years. The kings of Crete were the first to be prominent in the ancient Greek world, a hegemony based upon their maritime power. They extended their dominion over both the mainland and the archipelago. Later the mainland became subject to the leaders of a coalition of cities. These were Agamemnon and Menelaus, the kings of Mycenae and Sparta, who brought under their authority the chieftains of the peninsula and the islands alike. In the Trojan War the Cretans, like the other allies, fought under the command of Agamemnon.

For all their unaccountable ignorance of this pre-Hellenic civilization, the Greeks preserved in their myths and legends the memory of the hegemony of Crete. An ancient king of Crete named Minos was supposed to have been the first ruler of the seas. Here was his palace, the famous Labyrinth, from which he gave forth his laws. Even in the field of art it was a son of Crete, Daedalus by name, who came over to the peninsula to give life to their statues. There is no doubt that a considerable amount of truth lies hidden in in these fanciful tales.

The first methodical exploration of Crete was due to the initiative of Italian archaeologists. An expedition directed by Federico Halbher took advantage of the occupation of Crete by the European powers to begin the excavation of the royal palace at Phaestus which overlooks the plain of Messara (fig. 286). A little later, Arthur J. Evans, professor of archaeology at Oxford, began with the aid of the British School at Athens to explore the palace at Cnossus which is proba-

bly the great ruin which the Greeks believed to be the Labyrinth (fig. 287).

The palace of Minos at Cnossus had been rebuilt three times, so Evans was able to note three different layers, or strata, in the course of his excavations. Here, three distinct styles were encountered which are called those of Minoan Periods I, II and III. Another nomenclature employed is Early, Middle and Late Minoan. The principal basis of this classification is the character of the pottery found in the different strata (fig. 288). When a trench was dug down to the native rock beneath the palace it was found that the first occupants of the site had been a primitive neolithic people who had left a layer of remains approximately twenty-one feet thick. On top of this was found a palace which was found to be contemporary with an Egyptian dynasty of about the year 2800 B.C. Here we begin to find remains characteristic of the civilization of Crete. Evans classes the objects from this stratum as belonging to Minoan Period I. Later this palace was rebuilt and we find pottery somewhat different from that of the first structure. This is from Period II or Middle Minoan. Its style is characteristic of the other palaces of Crete and, for that matter, of the civilization of these islands generally. The most prominent decorative themes are representations of marine life and a highly developed cult of the axe and pillar. Period III, or Late Minoan, coincides with that of most of the objects found at Mycenae. It is

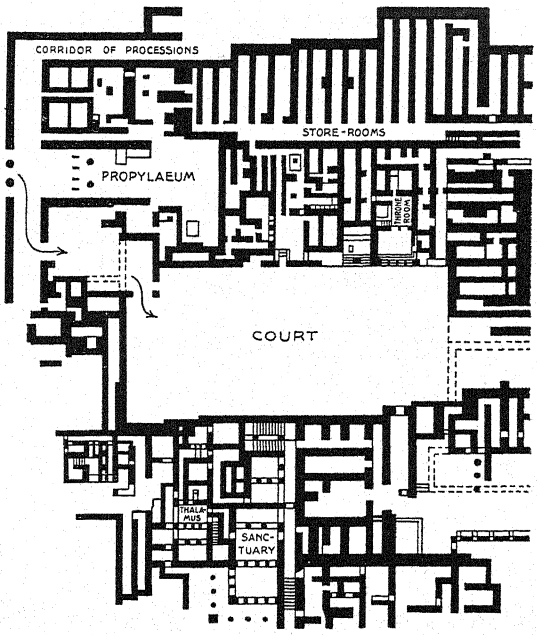


Fig. 287.—Plan of the palace at Cnossus. CRETE.

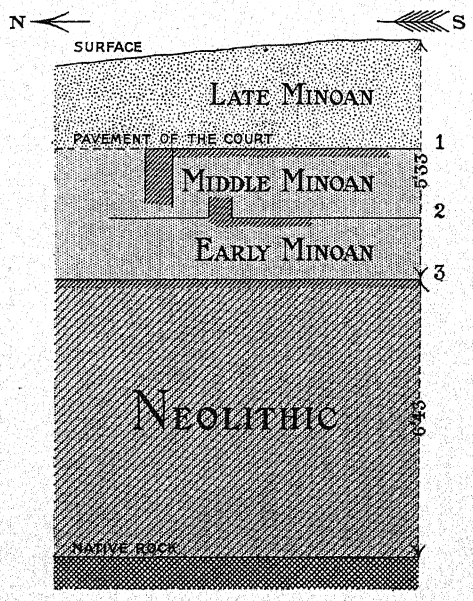


Fig. 288.—Cross-section showing stratification of the palace at Cnossus.
1. 1600 to 1100 B.C.—2. 2200 to 1600 B.C.
3. 2800 to 2200 B.C.

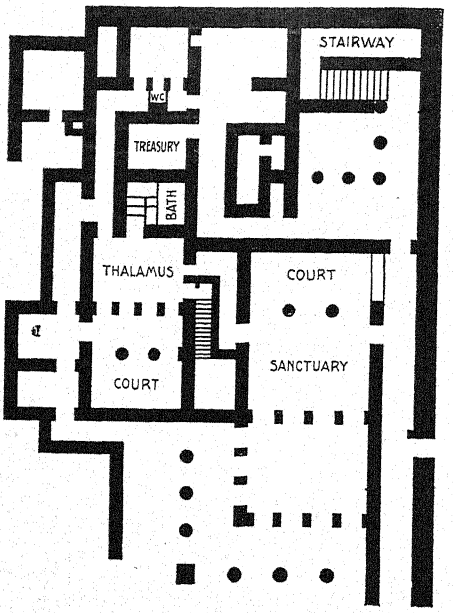


Fig. 289. — Plan of the Queen's Megaron in the palace at Cnossus.

evident that by this time Crete had lost its leadership, and even in its art followed the example of the peoples of the mainland.

Evans' judgment regarding these strata is now almost unanimously accepted, and the remains found on the site of the palace of Minos serve to correlate most of the objects belonging to this long pre-Hellenic period which began about 2800 B.C. and did not conclude until nearly 1000 B.C. So we see that this Aegean art had over fifteen hundred years to develope its styles and types.

In the study of Cnossus our attention centres chiefly on the second palace which is Middle Minoan and is the one that has been most thoroughly explored. Our knowledge of the lower palace has been gained largely from trial shafts and trenches. The royal residence was a large building constructed of rectangular blocks of stone. It is interesting to note that walls for defence were entirely lacking; we can only conclude that the sea-lords of this island enjoyed complete domestic peace and felt sufficiently guarded by their prestige abroad.

Upon the stone blocks of the walls at Cnossus we find representations of the double-edged axe; surely this palace was dedicated to the deity identified with this symbol. The name, labyrinth, is apparently derived from a word similar to *labrys*, the old Carian word for a double axe. In one of the halls Evans discovered a marble throne intact which may have given rise to the legend of the throne of Minos.

Certainly the plan of the palace reproduced in figure 287 seems like a labyrinth. It is difficult to discern the purpose of the maze of apartments surrounding the main court which is more than 150 feet long and to define their relation to one another. We can distinguish the entrance, a corridor passing a series of store-rooms, the throne-room with its vestibule opening on the court and the thalamus of the queen on the other side in the more secluded portion of the palace. A detailed plan of the rooms surrounding the so-called Queen's Megaron taken from Evans' work is shown in order to call attention to the complex of

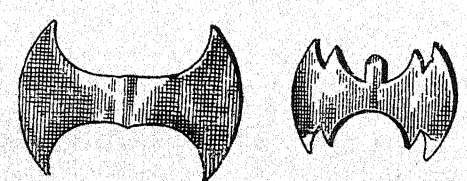


Fig. 290. — Small gold amulets in the form of an axe discovered at Cnossus.

corridors and narrow passages so characteristic of this structure (fig. 289). The important part played by the columns in these pre-Hellenic buildings will be readily noted. It seems as though the builders of Cnossus were especially fond of these vertical supports and employed them whenever it was possible. Perhaps they were impelled by some religious motive. The worship of the column as the symbol of the Magna Mater seems to be undeniable. On engraved gems we frequently see representations of this cult, and the column on the relief of the lions at Mycenae is also a religious emblem set up over the sacred gateway as a protecting egis.

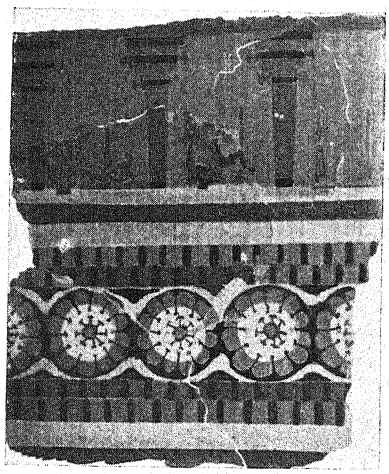


Fig. 291. — Fresco in the palace of Cnossus representing the pillar and axe. *(Evans.)*

Axes were incised on the stone blocks of the walls, even where they were afterward covered with stucco and paintings. Small gold amulets in the form of an axe have been found at Cnossus as well.

The connection between the pillar and the axe can be seen in one of the frescoes at Cnossus where we see a representation of a pre-Hellenic temple. Here a line of columns is depicted with axes attached to either side of the capitals (fig. 291). Both the pillar and the axe, therefore, must have possessed a profound significance in the religion of these people. The mystical character of this frieze is evident from the presence of other objects such as the sacred horns. We are still ignorant of their meaning, but they occur with a similarity that is startling in the religions of many other ancient nations. Even on the altar of the temple at Jerusalem we find these strange objects which were apparently held sacred by the Hebrews as well. When Joab, one of David's former captains, was pursued by Solomon, he "fled unto the tabernacle of the Lord, and took hold on the horns of the altar". We find the same symbol on certain prehistoric sites in Europe including Spain.

The axe and pillar are frequently repeated on the walls of the palace of Cnossus. It is evident that they were held in the highest veneration, and they give an air of mysticism to the whole structure entirely in keeping with the legendary character of Minos, priest-king. In one of the courts Evans found a small group of three columns which are undoubtedly a miniature representation of a pre-Hellenic shrine (fig. 292). Strangely enough, we find on the capital of each column the same cylindrical forms which are carved in relief on the

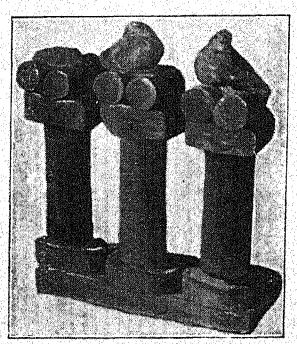


Fig. 292. — Miniature shrine for the worship of the pillar. *(Evans.)*

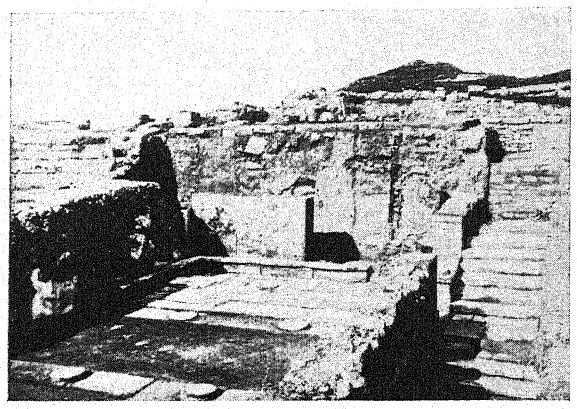


Fig. 293. — Megaron of the palace at Phaestus in Crete showing the stone supports for the columns.

pillar of the Lion Gate at Mycenae (fig. 276).

This pre-Hellenic column was usually of wood. In the floors of the Cretan palaces we see the circular bases of these wooden pillars (fig. 293). Evans even discovered a cypress shaft in an excellent state of preservation. On the small ivory reliefs and other carvings we also find this column, here tapering toward the base as on the Lion Gate. Its only capital is a plain curved moulding similar to the scotia of the classical column. Above it is a frieze of a well defined type like that of the Treasury of Atreus ornamented with medallions separated by a feature corresponding to the triglyph. In figure 294 we see a restoration of the pre-Hellenic megaron; on the façade is a portico of tapering columns behind which are the doors. Inside, the roof is supported by four columns, and from the centre of the roof rises a smaller square superstructure like a "lantern".

The megaron was the principal apartment and here they held meetings and religious services. Even after the palaces were abandoned the former subjects of these pre-Hellenic chieftains still held this portion of the building in the highest veneration.

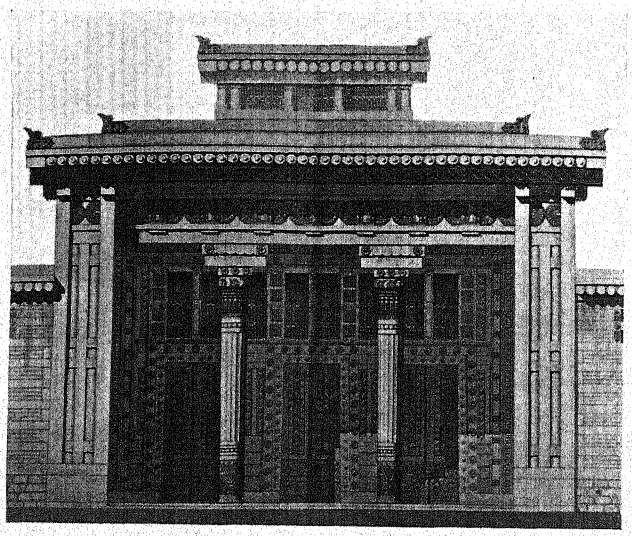


Fig. 294. — Restoration of the façade of a pre-Hellenic megaron. *(Perrot and Chipiez.)*

After they had excavated the royal palace at Cnossus, the British archaeologists explored other structures in the neighborhood which are believed to have been royal villas or country homes of the Cretan nobility. Another Aegean city was also explored at Palaikastro on the coast

of the island farthest east. After the Italians had completed their investigations at Phaestus, they began work on another palace at Hagia Triada. All these Cretan palaces are of the same complicated character and are grouped about a handsome court. Monumental stairways afforded access to the higher terraces when the building was set upon a hill. Even private houses were of more than one story and were surmounted by a "lantern" in the centre, as we see from the porcelain models. The latter may be ex votos; they were discovered at Cnossus by Evans (fig. 295).

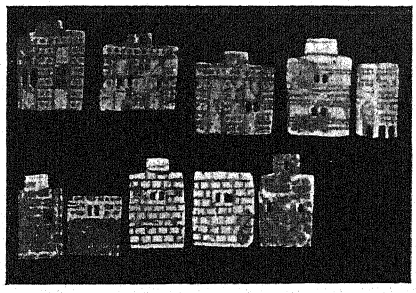


Fig. 295. — Miniature terra-cotta houses. Cnossus.

As for structural technique, the earliest known monuments of this period, the walls of Tiryns and Mycenae, were of huge rudely shaped stone blocks and were known as Cyclopean. The walls of Troy, on the other hand, were some-

Fig. 296. — Priestess bearing a casket. Fresco at Tiryns.

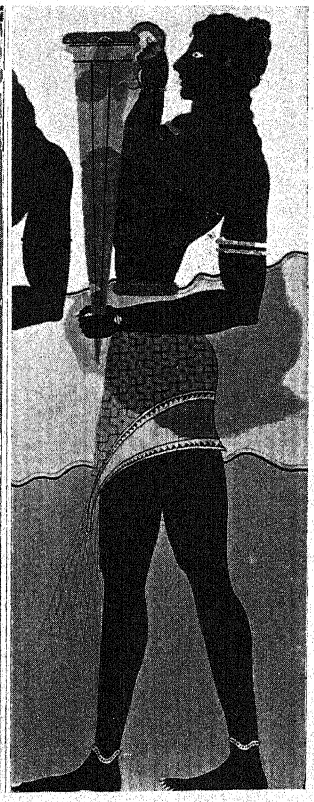


Fig. 297. — Cup-bearer. Fresco at Cnossus. Crete.

Fig. 298. — Fresco at Cnossus. CRETE.

times of brick reinforced with wooden beams. The frieze of the Treasury of Atreus at Mycenae was probably composed of stone of various colors forming a natural polychrome.

The walls of the Cretan palaces were constructed of rectangular stone blocks and covered with fresco-paintings, many remains of which are still to be seen. Schliemann had already discovered at Tiryns fragments of paintings representing bull-fights, but the palace of Cnossus was the most richly decorated of all. In the so-called Corridor of Processions was found a series of figures bearing vessels and other ritual objects (fig. 297). Female figures are so frequently represented in all these palaces that it is believed that women played an important part in the religious services of these people (figs. 296 and 298).

An Italian expedition discovered at Hagia Triada a painted sarcophagus on which we see represented interesting ceremonies connected with the worship of the axe and pillar. These are performed by women (fig. 299). To one side is

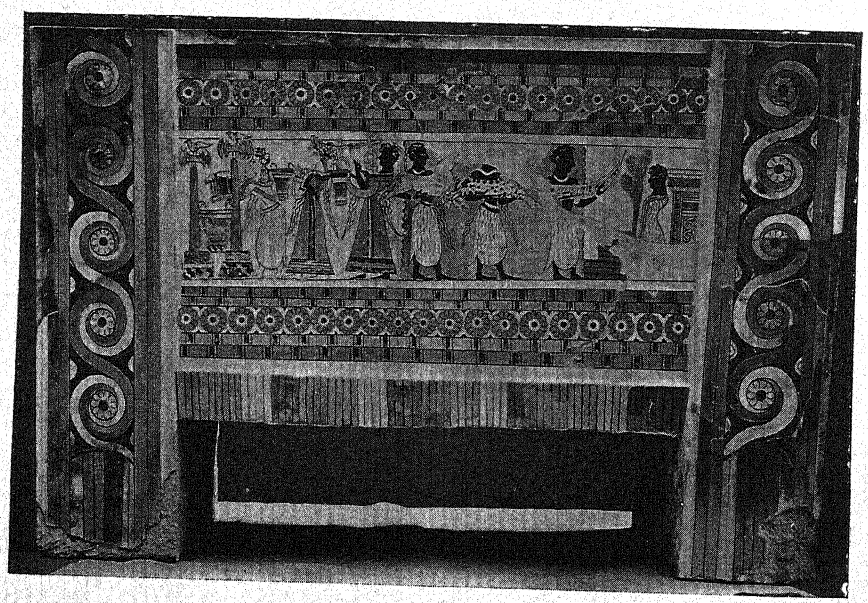


Fig. 299. — Sarcophagus of Hagia Triada. CRETE.

Ivory and gold statuette of a Cretan priestess. (Height 6.3 inches.)
(Boston Museum of Fine Arts.)

what is evidently a funeral ceremony, Three figures advance to the right offering a boat and two kids to the spirit of the deceased which stands rigidly before the tomb. To the left is another group of three women. A young priestess pours the sacrificial blood upon an altar set between two columns both of which are surmounted by double axes. Behind her another woman approaches with two vases, and a third plays a harp. All three are similarly dressed, their waists tightly laced in the manner that gives these figures such a modern appearance. On the other three sides of the sarcophagus are other scenes of a religious nature. We see two bullocks sacrificed by women and a goddess borne in a car drawn by griffins.

Fig. 300. — Faïence figure of a pre-Hellenic priestess.

In 1904 Evans discovered at Cnossus a number of small faïence figures of these priestesses with the characteristic apron, the tightly laced waist, bared arms and breast, and skirt ornamented with colored flounces (fig. 300). In their hands they carry serpents, and on the head of one is a raised tiara. The most beautiful of these figures is an ivory and gold statuette acquired by the Boston Museum in 1914. It is an absolutely authentic piece and there is no question as to its genuineness. It was brought to America without its owner even being aware of its existence. A patroness of the Boston Museum of Fine Arts purchased in Crete a mass of earth, just as it came from the spade, containing a number of ivory and gold fragments. It was never suspected that when they were pieced together we should find a masterpiece of art, marvelous in its grace and intensity of feeling. (Plate XXIX.) The king appears to have had within his palace at Cnossus a pottery of his own like those at El Retiro, Sèvres and Capo-di-Monte. Here also were manufactured the beautiful blue and white porcelain imitations of Egyptian work. The style of this Aegean art has a grace and naturalness and a sympathetic treatment of the lower forms of life never encountered in the valley of the Nile. In the course of his excavations Evans found a porcelain craw-fish so perfect that

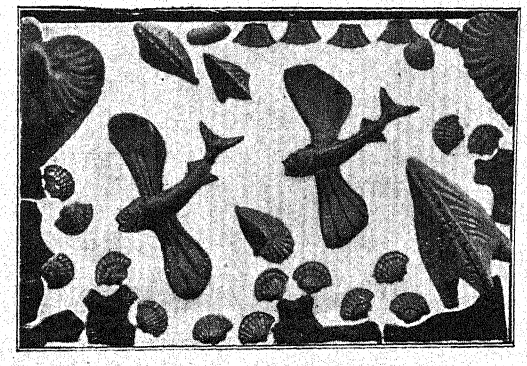


Fig. 301. — Painting on faïence from Cnossus. (Restored.)

Fig. 302. — Porcelain vase with relief design. CNOSSUS.

he took it at first to be a fossil. The small painted porcelain reproduced in figure 301 will give the reader some idea of the surprising skill with which they represented the forms of marine life, which would naturally be of interest to an island people. The splendid blue and white porcelain vase in figure 302 is another masterpiece from the pottery at Cnossus.

On the other hand, the painted pottery which is one of the most characteristic products of this Aegean civilization is confined to a range of two colors, a natural earth color, a yellowish ochre, and the color of the design which is also an earth color, although darker than the other. With these two shades only, the vase-painters of Mycenae and Crete decorated their pottery admirably. It is true that they sometimes covered it with a coat of glazed enamel.

The Aegean vases are often ornamented with cuttle-fish, coral, mollusks and other marine animals. Again we find them decorated with plant forms as on the beautiful vase ornamented with lilies reproduced in figure 303. Only once do we find human figures on a pre-Hellenic vase; this is the famous "vase of the warriors" from Mycenae, now in the Museum of Athens (fig. 304).

Pre-Hellenic ceramics were at their best in Period II. The vases of this period are covered with marine animals and plants. We see undulating stems of sea-weed, mollusks, corals, small sea-horses and nautili with their wave-like membranes. Red cuttle-fish with long twisting tentacles cling to the curved surface of the vase. In figure 305 we see how the painter employed these marine forms; the spaces left vacant between the tentacles of a cuttle-fish are filled with plants from the bottom of the sea.

The forms of the vases are also characteristic. The Aegean potters display a preference for two or three types. One is a conical vase with simple lines like those in figures 302 and 303, and another is a vessel with handles and a thin neck which the Greeks later called an oenochoe.

Fig. 303. — Painted vase. CNOSSUS.

We have discussed ceramics and decorative painting before taking up sculpture because painting was so closely connected with architecture, being employed extensively in the ornamentation of the palaces. Except for the relief of the lions at Mycenae, no large monumental sculpture by this people has come down to us. The lack of images in their worship of the axe and pillar would not stimulate the production of large sculptures. A number of small reliefs have

been discovered like the groups from Cnossus. Among the latter, that of a goat and kids displays the marvellous skill of the Aegean artists in copying nature (fig. 306). The steatite vase from Hagia Triada with its reliefs representing the return of the harvesters is another evidence of this artistic ability. The men sing as they march along, and one of them beats a drum. The dark color of the steatite gives the effect of twilight as they return from the fields (fig. 307). The figures are admirably grouped, and the relief produces an impression of perspective found nowhere in the art of Egypt or the Orient.

Fig. 304.— The vase of the warriors. *(Museum of Athens.)*

It is above all in gold-work that Aegean art seems so modern. Geometrical designs predominate; rosettes like those of the Orient are symmetrically combined with rings which encircle the vessel. (Plate XXX, A and B.) The reliefs of these goldsmiths of pre-Hellenic Greece are masterpieces of sculpture. The forms, too, of their small cups, bracelets and diadems display the most exquisite taste.

Two gold cups from Vaphio are magnificent examples of relief work and reflect an intense feeling for life. Both are ornamented with scenes of bull-hunting. Some of the animals are entangled in nets, while others escape; a man is knocked over in their flight. This human figure displays the thin waist, long arms and well developed muscles so characteristic of Aegean art. The landscape, too, is suggested with surpassing skill; there are only a few trees, but these are set in different planes. (Plate XXX, C.)

Schliemann found a number of daggers at Mycenae, and these are also engraved with animated hunting scenes (fig. 309). These goldsmiths cast beautiful heads of bulls in precious metals for votive offerings as well (fig. 308). In Egyptian reliefs we see the Keftui, or peoples of "The Ring" and of the "Lands to the West" bringing bulls' heads of gold and vessels to Pharaoh as gifts or tribute. It is now believed that these Keftui were the seafaring subjects of King Minos; we know that their voyages extended even to the distant coasts of the Atlantic. A number of bronze bulls' heads similar to those from Mycenae have been found in Mallorca (fig. 233), and it is entirely possible that the *taulas* of the ancient Balearic temples are a relic of a pillar worship of the people who built the *talayots* of these islands.

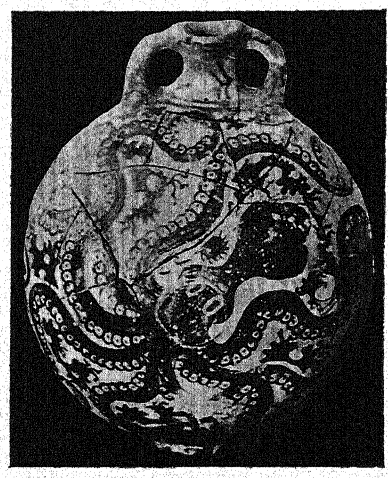


Fig. 305.— Aegean vase. *(Museum of Candia.)*

We see other evidences of the Aegean

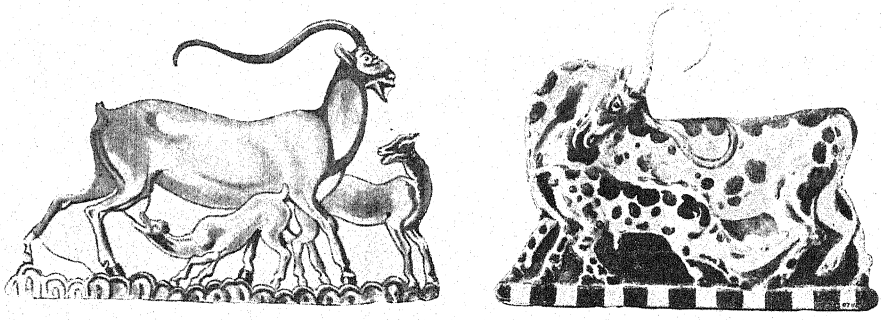


Fig. 306. — Porcelain reliefs from Cnossus.

influence on the early inhabitants of Spain in Iberian pottery with its plant designs. These are simply a survival of Minoan ceramic art.

We should not be surprised at this spread of Aegean art throughout the Mediterranean area, for Crete was a maritime power like Phoenicia in later times and Venice during the Middle Ages. These navigators had bases at certain points on the Asiatic coast as at Gaza in Palestine, and there was a colony of them at Ascalon as well. They carried on an extensive commerce with Egypt, so the mutual influence of these two civilizations upon one another was considerable during the latter centuries of the second millenium before our era. The Egyptian scarabs have been the principal means of determining the age of the tombs of Mycenae and the palaces of Crete. As we have a fairly precise knowledge of the dates of the various Egyptian dynasties, a small scarab found in a Mycenaean tomb and bearing the name of Amenophis III has served as a starting point on which to base the chronological study of these ruins. Egyptian objects discovered at Cnossus have further enabled us to fix the periods of the various structures. This influence, as we have noted, was mutual. Fragments of Mycenaean pottery have been found in Egypt and it is believed that the artistic tastes of these sea-peoples are reflected in the work of the Egyptian artists at Tell-el-Amarna, where the favorite residence of Amenophis IV was located.

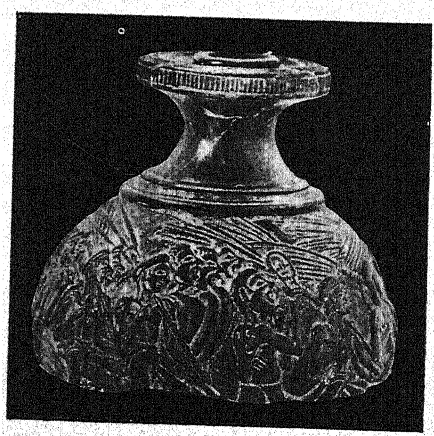
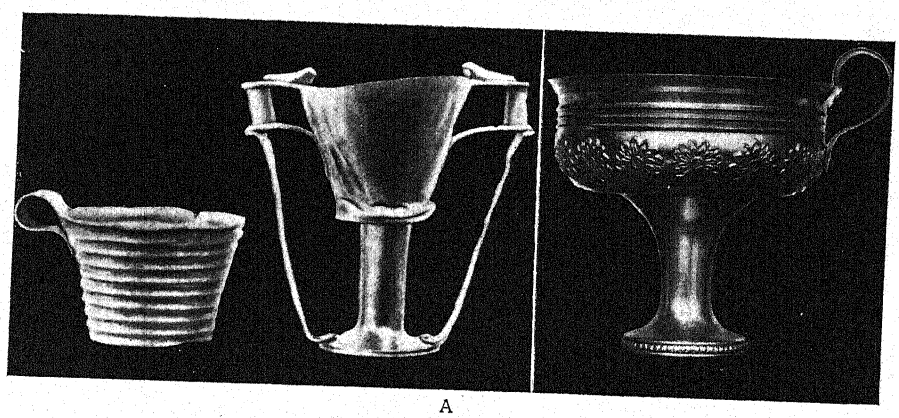


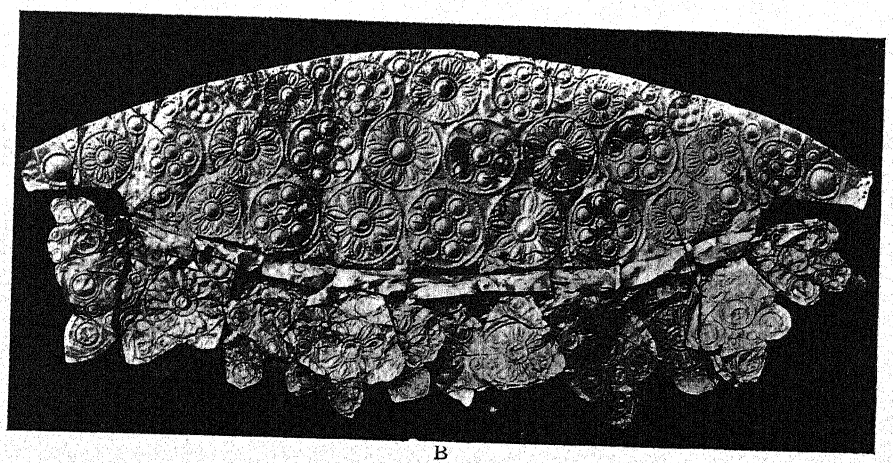
Fig. 307. — Steatite vase representing the harvesters' return. *(Museum of Candia.)*

The relations of these people with the nations of Western Asia have also been confirmed. The Italians discovered at Hagia Triada a small steatite sphinx resembling the human-headed bulls of Babylonia.

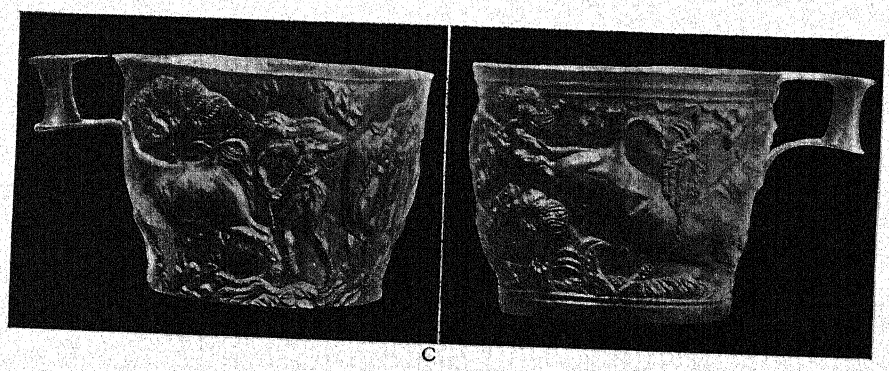
But leaving aside their artistic merit, the monuments and objects uncovered by these excavations are of enormous value in the light they shed upon the poetical narratives of the Homeric epics. They were compiled by the poets of Ionia who



A



B



C

PRE-HELLENIC GOLD WORK. — A. Gold cups from Mycenae. — B. Tiara from Mycenae. C. Gold cups from Vaphio. *(Museum of Athens.)*

knew nothing of pre-Hellenic Greece, but who felt impelled to perpetuate the most ancient poetry of their land and so frequent references to this ancient Aegean art could not but creep into their tales and descriptions. The palace of Ulysses had two stories like those of Cnossus; the propylaea at Tiryns make plain what was meant by the "resounding portico" of the house of Menelaus. A scene described in the Odyssey is fully explained by the baths found at Cnossus and Tiryns, and we see in the megaron the Homeric hall with its hearth and the columns against which the old bard, Demodocus, leaned, as he sang before the court of Alcinous.

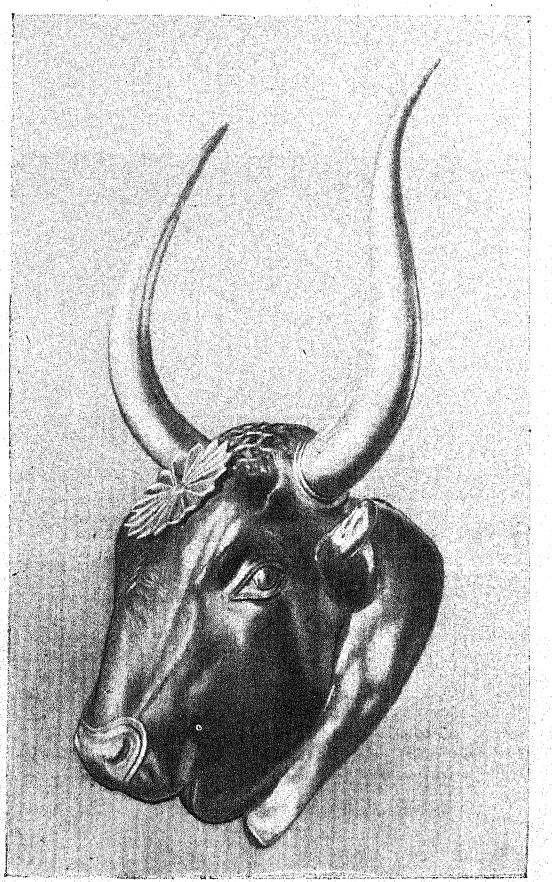


Fig. 308. — Gold votive offering found at Mycenae.

The amazing thing about it all is the large number of discoveries in the pre-Hellenic field which confirm the stories of Homer. We find palaces and cities, but no temples, and we remember that Homer says nothing of temples. The domed tombs with their coffins, or *larnax,* seem to contradict the burial method mentioned in the Iliad, that is in a tumulus of earth, sometimes surrounded by a grove of trees. Andromache thus describes her father's tomb in Thebes. But we must not forget that the Iliad pictures the customs of men who have lived for ten years in an armed camp. On the other hand Homer is most accurate in his descriptions of palaces, furniture, arms, chariots and the like. Does he tell of the customs of times in the past much as Walter Scott portrays scenes in the days of the Crusades or the French authors of the Chansons de Geste describe the characters of Charlemagne and his twelve peers? It seems very probable that such was the case. Today it is again believed that Homer was a real person, an inspired poet who composed both the Iliad and the Odyssey. But if this is true, it must be admitted that he made use of many legends and songs of the pre-Hellenic period and that he had before him the remains of the pre-Hellenic cities still in a comparatively good state of preservation. The frescoes, like those of Tiryns and Cnossus, would give him more information of this

ancient civilization than we possess today. Homer's poems, therefore, are supplemented by modern archaelogical research which vindicates both the antiquity and the accuracy of the poet. This alone would be sufficient to arouse an intense interest in the art of pre-Hellenic Greece.

Summary. — Prior to the classical art of Greece which began about the Ninth Century B.C., there was an earlier civilization distinct from the Greek and native to the country, which is known as pre-Hellenic or Aegean. It first developed in Crete as seen in the royal palaces of Cnossus, Phaestus and Hagia Triada. From Crete it spread to the mainland. Characteristic of its earliest style are certain representations of marine life. The palaces of Crete were not defended by walls or ramparts. They are built around great courts and monumental stairways lead to their terraces. The principal apartment is the megaron which opens into the court. A similar palace exists at Tiryns. About the year 1200 B.C. the hegemony of the various pre-Hellenic peoples passed over to the mainland to the city of Mycenae which was the head of a confederacy. This was a walled city; on its gateway are two sculptured lions facing a sacred column. Burial methods changed materially in the course of the development of this civilization. At first the bodies were buried in large domed tombs with a passage-entrance. Other remains accompanied by gold and other articles of value were interred in pit-graves on the agora at Mycenae and above them were set up stelae carved in relief. Painted terra-cotta coffins constitute a third method of burial. No temples date from this period. In the royal palaces was worshipped a deity symbolized by the axe and the pillar. Images were not used in this connection. Consequently we have no large sculptures, but the pre-Hellenic artists produced beautiful reliefs in porcelain, steatite and precious metals.

Buildings were ornamented with wall-paintings. Beautiful frescoes are found in nearly all the Cretan palaces and at Tiryns as well. Pottery was decorated with representations of marine life, such as sea-weed, cuttle-fish, shells and the like.

Bibliography. — For a general survey of the subject, see DUSSAUD: *Les civilisations préhelléniques*, 1910, and PERROT AND CHIPIEZ: *Histoire de l'Art dans l'antiquité*, vol. VI, 1895.

H. SCHLIEMANN: *Mykenae*, 1898; *Orchomenos*, 1881; *Ilios*, 1882; *Tiryns*, 1886.— W. DÖRPFELD: *Troja und Ilion*, 1912; *Das homerische Ithaka*, 1905; *Thera*, 1902-1909.—A. EVANS: *Reports of Excavations, Annual of British School at Athens*, 1900-1905. — For the worship of the pillar and the axe, see *Journal of Hellenic Studies*, vol. XXI.— D. MACKENZIE: *Cretan Palaces*, 1907.— F. HALBHERR: *Relatione degli scavi*, 1909. — H. BOYD: *Gournia*, 1905.— FURTWAENGLER AND LOESCARE: *Mykenische Thongefaesse*.— H. R. HALL: *Aegean Archaeology*, 1915.— C. H. HAWES: *Crete, the Forerunner of Greece*, 1909.— G. RODENWALDT: *Tiryns*, 1912.— TSOUNTAS AND MANATT: *The Mycenaean Age*, 1897.—A. EVANS: *The Palace of Knossus*, 1923.— R. DUSSAUD: *Civilizations préhelléniques*, 1914. — A. LANG: *Homer and his Age*, 1906.— W. LEAF: *Homer and History*, 1915.— J. ASCOTT: *The Unity of Homer*, 1921.

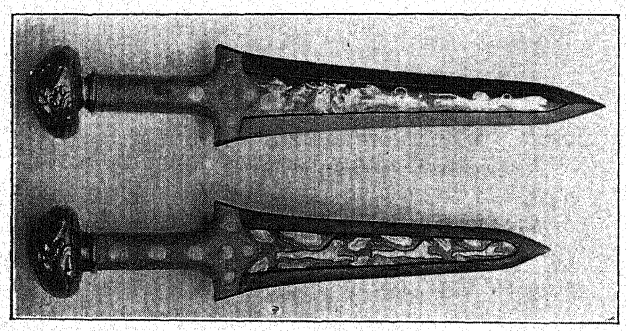


Fig. 309. — Engraved daggers from Mycenae.
(Museum of Athens.)

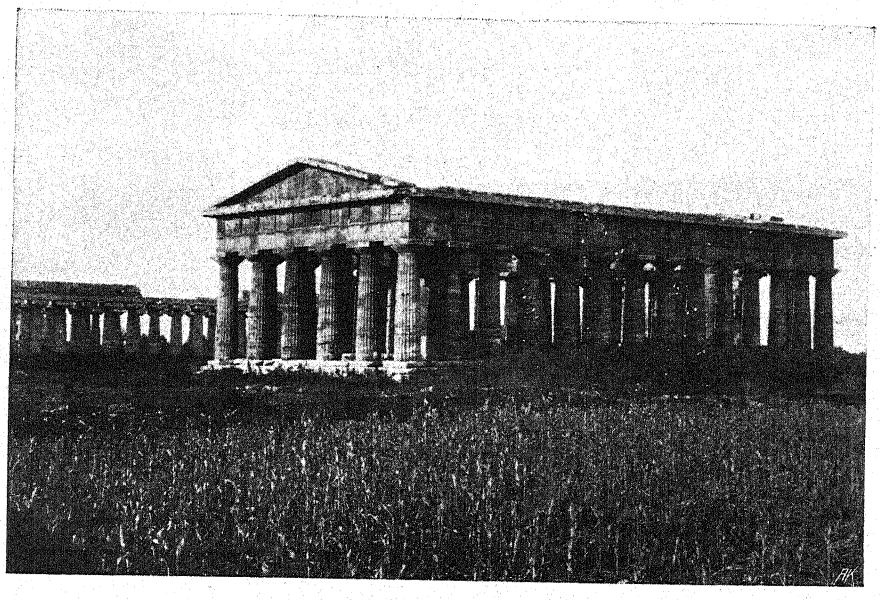


Fig. 310. — Doric Greek temples at Paestum.

CHAPTER XII

ARCHAIC GREECE. — THE GREEK TEMPLE. — ORDERS OF ARCHITECTURE. ORIGINS OF SCULPTURE. — ARCHAIC CERAMICS.

PRE-HELLENIC civilization was rudely interrupted at the beginning of the first millenium B.C. This catastrophe was not complete in Crete and the archipelago; the palaces of Cnossus and Phaestos seem to have been gradually abandoned rather than suddenly destroyed. But in the pre-eminent cities of Greece proper, Mycenae and Tiryns, the ruins still preserve clear indications of the fire and violent destruction which accompanied the sacking of these places.

The ancient Greeks, it is true, had a vague recollection of the struggles and disasters which attended this foreign invasion. They knew it under the name of the Dorian invasion or the return of the Heraclides, and it appears to have coincided with a general migration of peoples throughout Europe. The Greeks believed that these ancient invaders were the Dorian mountaineers of Thessaly who had come down from the north in order to dispossess the Ionians of the fertile lands of Attica and Peloponnesus. We therefore use these names, Dorian and Ionian, to explain this dualistic concept of the Greeks. The Ionians would be the primitive population of pre-Hellenic Greece who were expelled from their fortified acropolises by the northern mountaineers and obliged to emigrate to Asia and the archipelago, taking with them a part of the ancient tradition. This legend must contain a certain amount of truth, because, as a matter of fact, the Greek population of Asia and the islands always had a certain attitude

toward beauty and interpretation of form, which was peculiar to themselves and more in accordance with the pre-Hellenic tradition than that of the purely Dorian peoples of the Greek mainland.

On the other hand, we are still in doubt as to the real origin of these Dorian invaders. Later on they attempted to justify their occupation by supposing themselves to be the descendants of certain very ancient Hellenes, who had been expelled previously by the Ionians and, when they had become stronger, had returned to reclaim their homes and lands from the intruders, now apparently weakened by a long period of civilization. The Dorian chieftains later ennobled themselves by appropriating fanciful genealogies of heroic ancestors such as Hercules, Theseus, etc. This explains how this migration of northern peoples came to be known as "the return of the Heraclides", a decidedly milder term than "the Dorian invasion".

There seems to be no doubt that the better class of the pre-Hellenic population of Greece emigrated to Asia in order to escape the domination of these barbaric mountaineers. The occupation of the latter however can not be said to have covered the entire country. Some cities, such as Mycenae, were left in ruins, it is true. But in others, like Athens, the Ionian element was able to maintain itself on the defensive. In the Peloponnesian peninsula however, the Dorians established themselves firmly. Sparta, the great city of this region, was the centre of the Dorian people. Generally speaking, these wars of invasion and the rule of the Dorian leaders with their bands of mountaineers were everywhere fatal to culture and art. Greece therefore had to begin over again just as if her population had been always primitive. The Greeks themselves began to reckon their chronology from the first Olympiad, that is from the year 776 B.C. All previous history, such as that of the pre-Hellenic cities, was either unknown to them or remained concealed within the epic poems of legendary times.

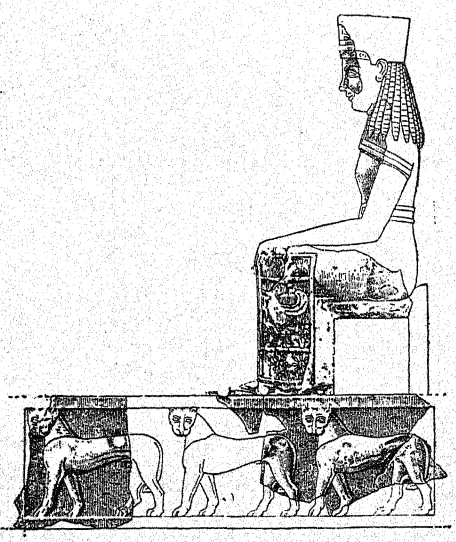


Fig. 311.—Sculpture of the feminine Greek deity. CRETE.

This absolute recommencement of Greek culture, two or three centuries after the Dorian invasion, had the result that a pre-Hellenic art was not felt to be necessary to explain the development of Greek art. In Egypt, although they were ignorant of pre-Pharaonic art, the problem of the origin of their art called for a certain amount of explanation; but in Greece this deficiency escaped notice. We see Greek classic art begin like that of a primitive people, and the barbaric remains of the 9th and 8th centuries B.C. following the Dorian invasion, have the characteristics of the art of a backward people

who had little more than emerged from the stone age. Consequently the study of Greek civilization and art begins with the *archaic* period, or with the centuries intervening between the Dorian invasion and the formation of the classic school. With the recent discoveries in Crete and Mycenae the history of Greek art becomes more complex, for we are obliged to first consider a *pre-Hellenic art* which reached a high state of development; then we must study the retrogression caused by the foreign occupation of the Dorians, thus forming what historians of art call the *archaic school,* and which becomes a sort of Greek middle age; and finally the renaissance of technique and the complete evolution of form constituting the great *classic art* which reached its highest perfection during the age of Pericles.

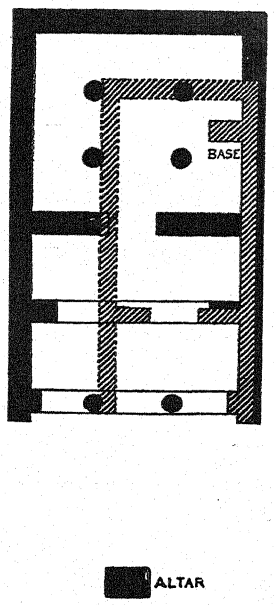


Fig. 312.—The primitive Greek Temple of Tiryns, built over the pre-Hellenic megaron. *(Frickenhaus.)*

Turning our attention to the development of this second period of Greek art following the Dorian invasion, we note the disappearance of certain characteristic features of the civilization which centred about Mycenae. The great walled acropolis soon disappeared, as if the Dorian chieftains were thus boasting of being better able to defend themselves in the open field. There also appears to have taken place a rapid intermingling of the invaders with the plebeian element which lived at the base of these pre-Hellenic citadels, of the class which we have seen dwelling outside the walls of Mycenae, or in the proletarian districts which have been discovered below the ruins of the fortifications at Tiryns.

We may well believe that the people would continue to repair to the abandoned acropolis of Mycenae, moved by a reverence inspired by the ancient worship which centred about each locality. We have already shown that in the palaces of Crete, as well as in those on the mainland, there was a large central court in which an altar was placed, immediately in front of the *megaron,* or assembly hall, which also opened into this court. When the nobles of Mycenae, Sparta and Tiryns abandoned their residences, the people of the lower city utilized the *megaron* for their religious ceremonies. This hall may have originally served as a depository of votive offerings consisting of small terra-cotta figures of the sort found in Tiryns and Mycenae. The reason for this was that the pre-Hellenic religion made no images of their gods. They did however have symbols, such as an axe, a pillar and the like. In any case, the feminine principle, which seems to have been a deity symbolized by an axe, is shown in human form in the primitive worship of Hera or Juno, of whom plastic figures must have been soon made. In addition to these small terra-cotta figures, the Italians discovered a few years ago in the Island of Crete, a primitive figure of this deity seated on a throne which rested on a base ornamented with lions (fig. 311). It was a tradition among the Greeks that the most ancient temple of their native state should

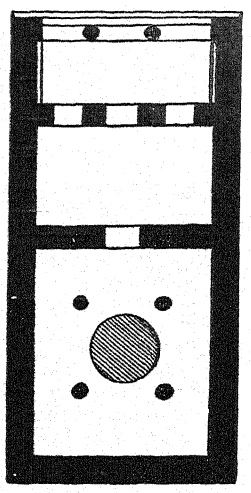


Fig. 313.—Pre-Hellenic megaron.

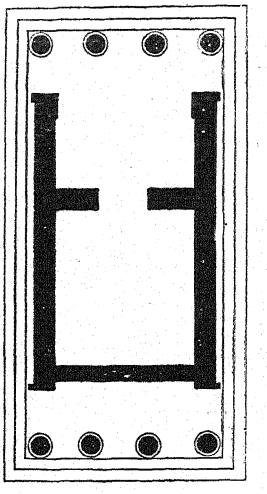


Fig. 314.—Temple of Ilissus.

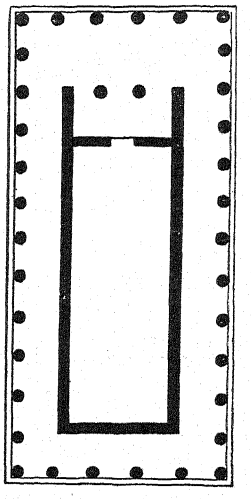


Fig. 315.—Temple of Assos.

be that of Juno. This was the case in Argos, and in Olympia as well; in the latter there have even been found some of the fragments of the head of the original figure of the goddess, which was of enormous size. The greater number of the shrines most venerated in Greece were dedicated to a feminine deity; it may well be that the original pre-Hellenic goddess was later diversified into various attributes which, in the course of time, came to be looked upon as so many different deities: Juno, Minerva, Diana.

But the temple proper originated in the pre-Hellenic megaron. Michaelis has noted that by giving a human dwelling to a deity for a habitation, its plastic representation in human form would, in a way, be expedited, because the megaron was part of the palace and a centre of collective life. The latest excavations on the site of the megaron of Tiryns have clearly shown the origin of the oldest Greek temples. The worship must have commenced in the megaron, the principal hall of the old palace and filled with memories of its former lords and the ceremonies of times past. When the palace finally went to ruin, a small temple was erected on the exact site of the megaron, as in Tiryns, the ground plan of which was superimposed upon the megaron as can be seen in figure 312. It is curious to note that the most important spot, which was where the altar stood, was piously kept in the same location, outside in the preserved court, as in the old pre-Hellenic days. For this reason the pedestal of the statue was set to one side in order that it might be in a line with the door and the altar. From that position the goddess could preside over the sacrifices which were made on the altar in the court. This must have been because the temple, which was smaller than the original megaron, was set somewhat to one side to make use of the foundation of one of the old walls, which thus brought the door away from the centre.

In the case of the temple of Tiryns, which rested on the walls of the megaron, it was later necessary to entirely reconstruct it up in the acropolis. One capital, which has been preserved from this second temple, is one of the oldest

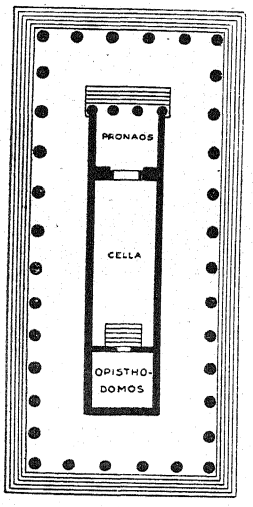


Fig. 316. — Temple D, Selinus.

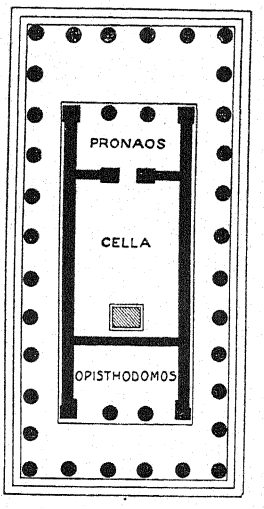


Fig. 317. — Temple of Ramnunte.

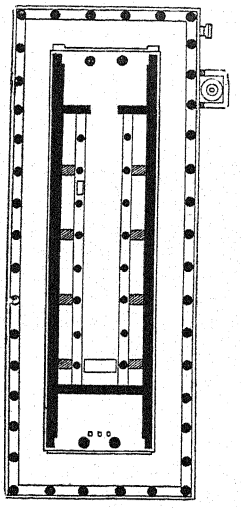


Fig. 318. — Temple of Juno. OLYMPIA.

of the Doric style. Finally the worshippers became weary of climbing up to the old sanctuary on the hill where the deserted palace stood, and worship was transferred to the neighboring city of Argos on the level plain; thus the most ancient Juno of Argos would be the successor of the pre-Hellenic deity of Tiryns.

Another clear example of this succession of cults in Greek temples is the Acropolis of Athens, which had been a pre-Hellenic fortress in the legendary times of Erectheus and Aenomaus. At first an archaic temple was erected upon its summit, then the *Hecatompedon,* and finally the Parthenon, which was con-

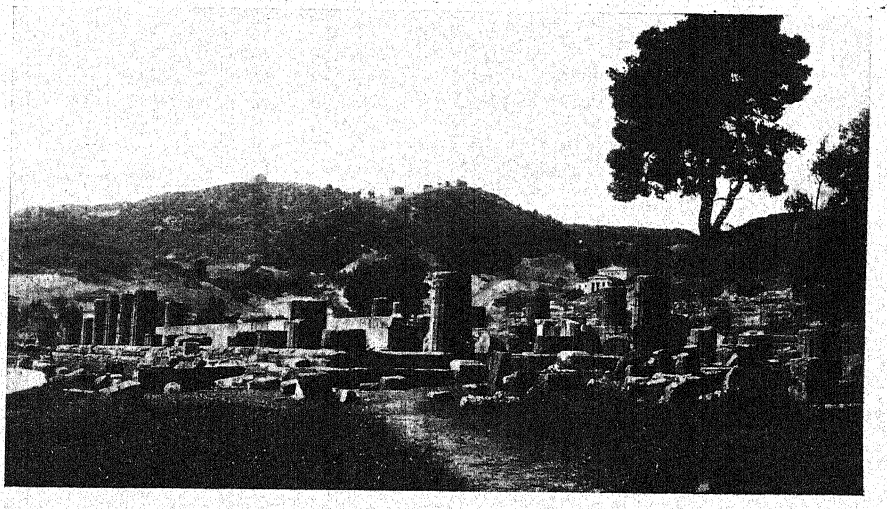


Fig. 319. — Ruins of the original temple of Juno. OLYMPIA.

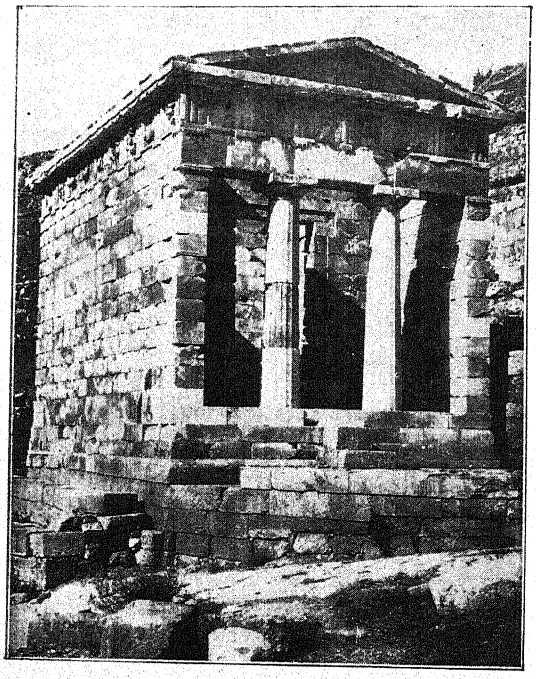
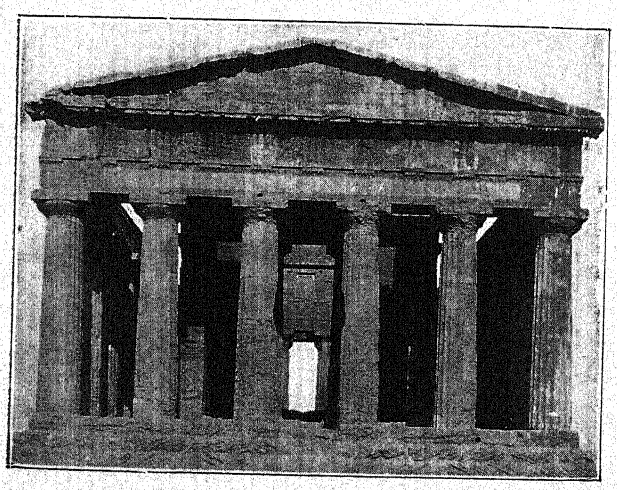


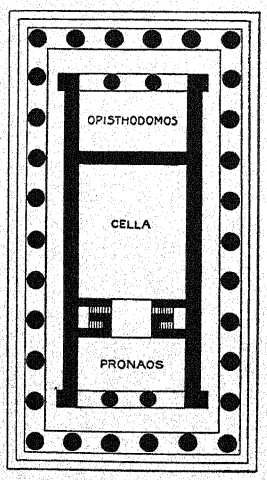
Fig. 320.—Temple *in antis*. Treasury of the Athenians. DELPHI.

structed and rebuilt in the 5th century B.C.

The pre-Hellenic megaron however underwent such extensive alterations that it was finally changed beyond recognition (figs. 313 to 318). The plan preserved the *cella* or *naos* and the antechamber or *pronaos* of the megaron, but a third feature soon appeared. This was a room located behind the *cella* which was called the *opisthodomos*. Besides, the megaron had been set into the surrounding portions of the original palace in such a manner that it had only the one façade which faced the court. When the temple became isolated, it was natural that it should be embellished by another row of columns behind it, and even by a portico or covered gallery which extended around all four sides of the building (figs. 315 to 318).

Such was the ancient temple of Juno of Olympia with its surrounding portico, which Pausanias described as a relic and perhaps the most ancient of any that had been preserved. Its ruins were discovered in the course of excava-





Figs. 321 & 322.—Elevation and plan of a hexastyle temple. AGRIGENTUM.

tions made in 1875 (figs. 318 and 319). The sites of the archaic temples of Ramnunte and Selinus (figs. 316 and 317) display all the characteristic features of the Greek temple.

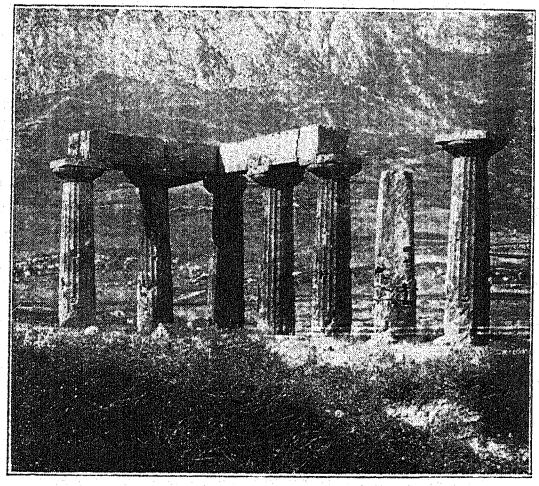


Fig. 323. — Archaic Doric temple of Corinth.

At times the temple did not have this exterior colonnade. It was then called *in antis,* because only the two columns of the *pronaos* were to be seen from the outside, as in the pre-Hellenic megaron, and the two walls of the *cella* end in two perpendicular bands of stone called *antes* (fig. 320). At other times a colonnade embellished only the two principal façades, in which case it consisted of four columns; when the colonnade ran all the way around the building, there were six columns in each of the two principal façades and the temple was called *hexastyle* (from *hexa,* the Greek word for six); when there were eight columns it became an *octastyle.* There are however only two *octastyle* temples in western Hellas, the Parthenon in Athens and one of the temples of Selinus in Sicily. The *hexastyle* was far more common. Its plan was a natural evolution of the megaron and all four faces were embellished by columns (figs. 321 and 322); the *in antis* form was usually reserved for small temples of secondary deities or for the typical *treasuries* of Delphi and Olympia. The latter were the especial shrines belonging to the different Greek cities but located within the precincts of the great national sanctuaries.

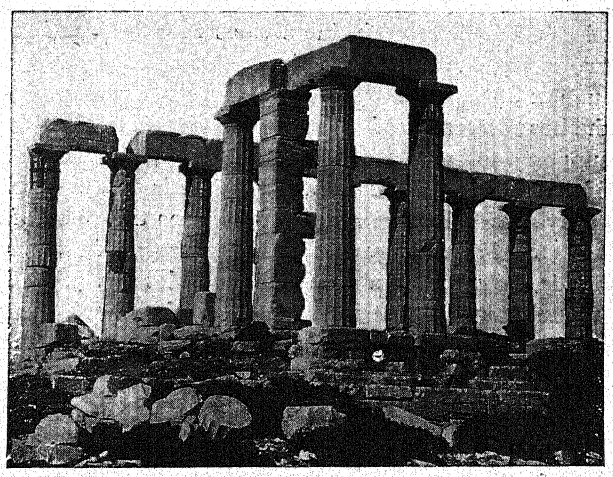


Fig. 324. — Classic Doric temple of Sunium.

At times the *in antis* arrangement, which is the simplest and the most similar to the pre-Hellenic megaron, indicates considerable antiquity. For example, this was the type of the original temple on the Acropolis of Athens, foundations of which have been discovered. Later it was sur-

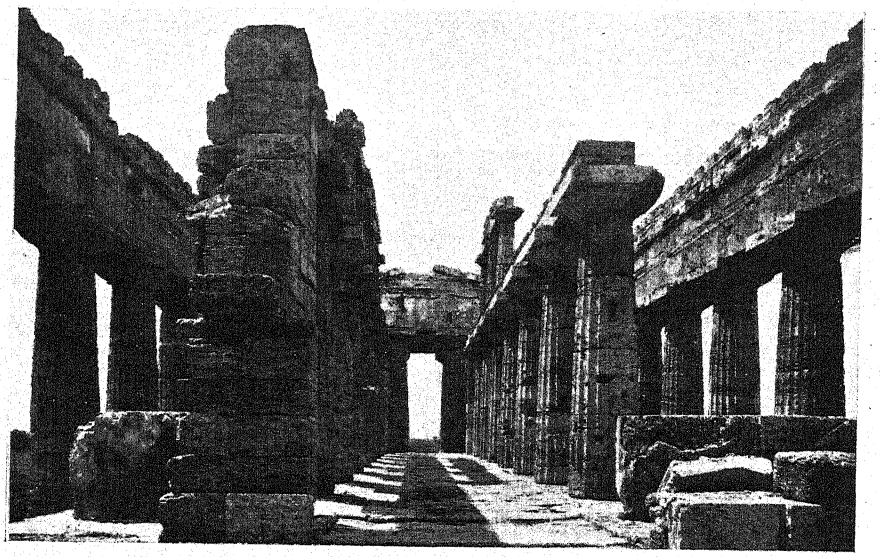


Fig. 325. – Interior of a temple with three naves. PAESTUM.

rounded by a row of columns or peristyle and thus converted into a temple of the *hexastyle* type. The antiquity of a temple is also indicated by the diameter of its columns; they are thicker and closer to each other in the older buildings, and in the course of time they become taller and are more widely spaced. A comparison of figures 323 and 324 will show the difference between a temple of the 6th century B.C. and one which dates from the close of the 5th.

Another indication of the antiquity of a temple is the length of the *cella;* it is long and narrow in the earlier buildings, because such a structure was more easily covered by transverse beams. At times the *cella* is divided into two aisles by a single line of columns running down the centre; when it is still wider, a line of columns along each side divides the interior of the temple into a nave and two aisles, the latter sometimes having a second floor as well. The temple of Juno at Olympia and the Parthenon of Athens were of this type, but perhaps the best preserved of all is the temple of Paestum in southern Italy, which is supposed to have been dedicated to Neptune because he was the principal deity of that city, which was named Poseidonia by the Greeks. In this ancient colony, today deserted, there are still to be seen the ruins of three great temples (figure 310), in the largest of which two rows of columns are still standing, which divide the *cella* into a nave and two aisles (fig. 325). The *cella,* therefore, is the sanctuary which contained the effigy of the god, the *pronaos* is the portico or antechamber, and the *opisthodomos,* the sacred depository of the ceremonial utensils and the treasure of the temple.

Now that we have some idea of the general arrangement of the plan of a Greek temple, we shall study the structural and decorative features of its exterior. We immediately notice two distinct types or styles called *orders,* all the details of which are repeated religiously: one is the *Doric order,* which was

preferred by the Greeks of the mainland and was the more severe and rectangular; the other is the *Ionic order,* more often employed by the Greeks of Asia. A third style appears later, the *Corinthian order,* which differs from the Ionic in the shape of its capital and which we shall take up when we come to the period to which it belongs. The first two, however, were employed in all the great buildings of the ancient Greek world: the Doric in the west, the temples of Olympia, Delphi, Athens, Corinth, Sicily and southern Italy; the Ionic in the great sanctuaries of Asia, the temples of Ephesus, Sardis, Samos, Miletus and Halicarnassus.

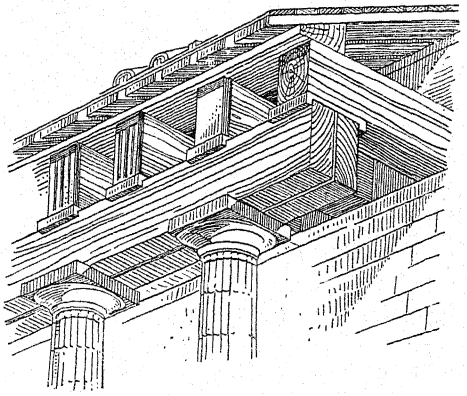


Fig. 326.—Wooden construction of the primitive Doric temple. *(Durm.)*

Let us begin with the Doric order to which all the examples belong which we have considered up to this point (fig. 328). The building is erected upon a base called a *stylobate.* It is approached by a flight of stone steps which are often excessively high; to reach the level of the temple floor it was necessary either to double the number of these steps or to construct an inclined plane at the centre of the façade of the building. The columns of the portico rise from the stylobate without bases of any sort and each is fluted with sixteen or twenty perpendicular striae which end in an arris. Of these, the upper ones terminate in a series of grooves which form what is called an *astragal* on which the capital rests. The shape of the capital is most characteristic; it consists of a simple convex moulding called an *echinus,* like a large cushion, which receives the weight of the upper part of the building and transmits it to the perpen-

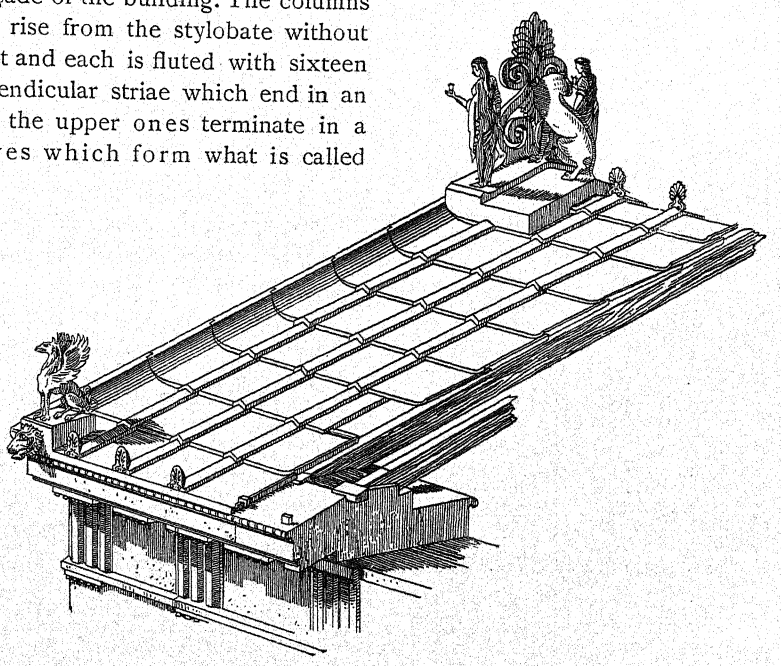


Fig. 327.—Roof of a classic Doric temple. *(Durm.)*

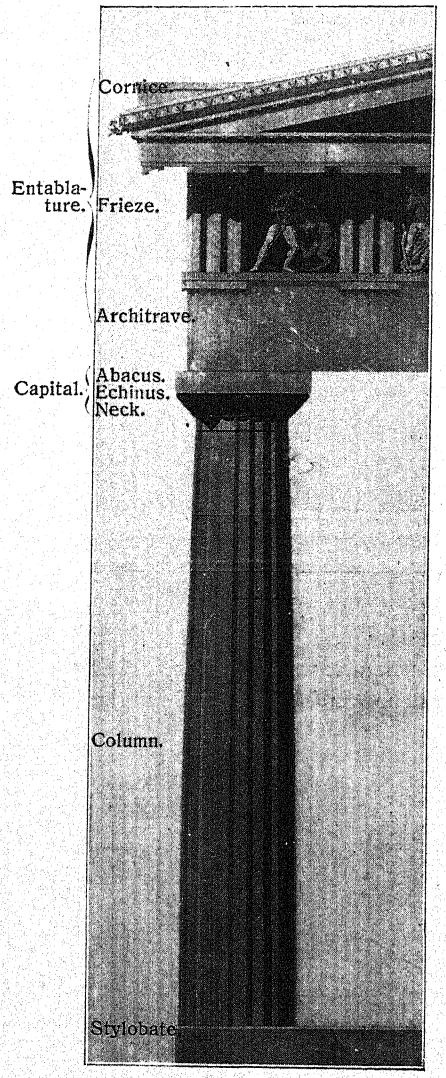


Fig. 328. — Scheme of the Doric order.

dicular support. The shape of the echinus changes according to the period; it is flat at first, and in later times is gracefully heightened. We have already noted that the column itself is thicker and shorter in the early temples; in the course of time it became more slender and the number of flutings increased. The lesson taught us by the ancient temple of Hera in Olympia is most interesting; at first it was constructed with columns of wood which were replaced by stone as fast as the former decayed. Pausanias, as late as the second century B.C., saw one of these wooden shafts in the opisthodomos. Now these columns of different periods in the temple of Hera differ both in diameter and the forms of their capitals; those who put them in must have conformed to the prevailing style of the current period, thus making of this temple an archaeological museum of columns.

Upon the columns rests the horizontal band called the *entablature*. This too was originally of wood. First a horizontal beam runs along the tops of the columns, other transverse beams are laid above the portico and on these rest the rafters which support the tiled roof (fig. 326). All these three features are found in temples constructed of stone. Instead of the horizontal beam, we have one or two matched blocks of stone extending from column to column. These are not decorated and form a plain zone in the Doric order which is called the *architrave*. Above this extends a band called the *frieze*, which is divided into rectangular compartments. Certain of these are decorated with vertical channels which recall the ends of the wooden beams of the portico and are called *triglyphs*. The other compartments must have been left open when the temples were of wood for one of the characters of a tragedy by Euripides escapes through such an opening. Later, however, they were closed by blocks which were painted or carved and called the *metopes*. These alternating triglyphs and metopes in the frieze constitute one of the most characteristic features of the Doric order. The cornice projects above the frieze in order to protect the lower part of the building from the rain. The water from the roof is caught by the cymatium. The Doric cornice, with the shadow which it casts, gives the effect of a thick horizontal line

extending along the upper part of the *façade*. The only sculptured decoration of this entire assembly is that of the metopes; all the other parts, from the top of the column to the scotia in which the cornice ends, are beautified only by their orderly and geometrical arrangement.

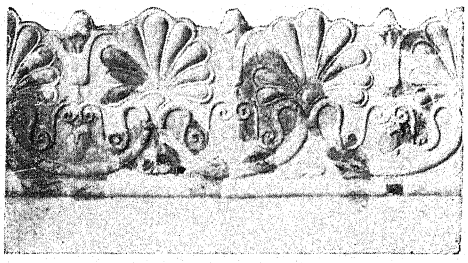


Fig. 329. — Terra-cotta cymatium.

The temple was roofed by means of paired rafters. When the width of the *cella* was too great, a horizontal connecting beam was added which formed a joist. The tiles rested directly upon the rafters. They were of terra-cotta at first and later of marble. The tiles were of two sorts, some flat with raised edges, which formed the channel, and others like ordinary gutter tiles, which covered the interstices between the first (fig. 327). On the two principal façades, the double slope of the roof outlines a triangle called the *pediment*, which was usually decorated with sculptures. The pitch of the pediment varies according to the period and its three angles are ornamented with carved tablets of marble or terra-cotta called *acroteria*. The acroteria were at first very simple like the terra-cotta one of geometrical design which abutted the moderately sloped pediment of the temple of Juno at Olympia; in later times they display a great variety of designs which frequently include two small female figures. The acroteria of the angles were very often ornamented with griffins or small victory figures.

The latest excavations at Aegina have revealed the gracefully complicated design of the central acroterium of the pediment of the temple there (fig. 330). The older temples, as in Sicily for example, often display other ceramic decorative features such as the cymatium which is high, polychrome, and contains channels to carry away the water from the roof.

It is curious to note that these pieces of terra-cotta were fashioned

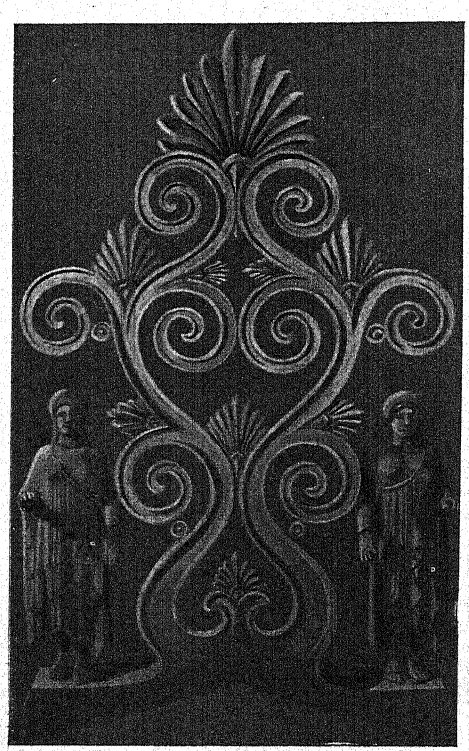


Fig. 330. — Central acroterium of Aegina.
(Restoration by Furtwaengler.)

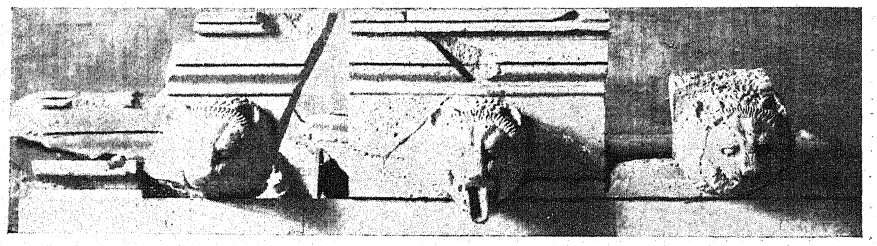


Fig. 331. — Stone cymatium of the temple of Hymera. *(Museum of Palermo.)*

in such a way that they could be nailed into place, even when the temple was built of stone, a demonstration of the survival of traditional methods which proves absolutely that the original Doric temple was of wood construction (fig. 329). When the temple was built of stone, the cymatia were ornamented with lions' heads which served as spouts to carry away the rain water (fig. 331).

There is no longer any doubt that the walls of the primitive Doric temple were of brick and its upper construction of wood. In the course of the excavation of the ancient temple of Juno at Olympia to which we have just referred, not a single stone was found which could have possibly belonged to the entablature. Apart from the capitals of the columns, the entire structure must have been of wood and brick. The remains of a Doric temple with brick walls and a wooden superstructure have been lately excavated at Thermos and the metopes are rectangular tablets of terra-cotta. Moreover, the origin of the temple in a primitive construction of timbers was anticipated the moment we fixed upon the megaron as the original type, as horizontal beams were frequently used in the construction of the pre-Hellenic palaces.

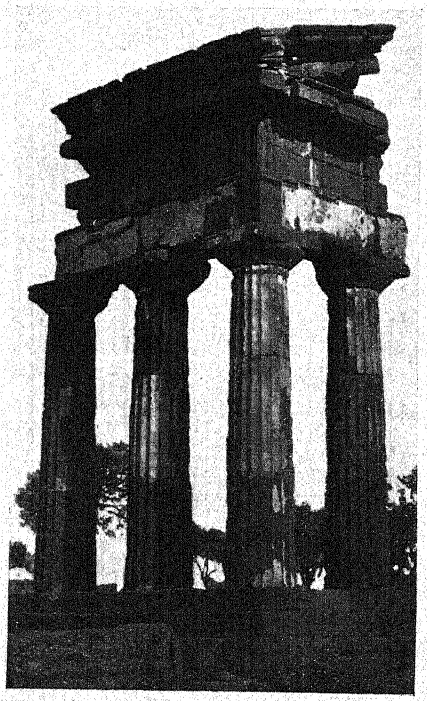


Fig. 332. — Doric temple with stucco coating for painting. AGRIGENTUM.

Since the effigy of the god stood in the *cella* of the Greek temple, the manner in which it was lighted has excited much curiosity. Much has been said of lofty windows or a line of apertures in the roof of the nave, but none of these ingenious suppositions seem very probable. It is more reasonable to believe that the *cella* was either an open court, — and this was actually the case in the greatest temples where the *cella* was too broad to be covered by beams or rafters, — or else it was completely enclosed and lighted only

from the doorways. The latter seems more frequently to have been the case. Thus the *cella* would be a dimly lighted hall filled with votive offerings, in the background of which arose the colossal statue of the deity. The ceiling was the ordinary wooden framework of the roof, usually consisting of the rafters and joists which joined them. Through these could be seen the flat lower surfaces of the marble or terra-cotta tiles. The temple was always painted in various colors. At first this was necessary to cover the rude brick walls; later the stone temples were given a fine coating of plaster. This smoothed the calcareous surface which was more or less porous. Many fragments of this coating of plaster still show traces of color (figure 332). From the fifth century on, temples were usually constructed of marble, but even then they were coated with a fine plaster of marble dust in order to conceal the joints. It was traditional to apply the color in such a manner as to bring out the structural features. On the capital only the astragal was painted red. The architrave was hardly ever polychrome. The listel was blue and the triglyphs were always blue with black striae. The background of the metope was painted as were certain features of the cornice, the latter with a combination of the honeysuckle pattern and the Grecian fret. The acroteria were brightly colored and the background of the pediment was black or red in order to make the sculpture stand out. In the interior of the *cella* the polychrome decoration must have been mostly in the frieze and ceiling, the latter in order to conceal the rather crude arrangement of the beams and rafters.

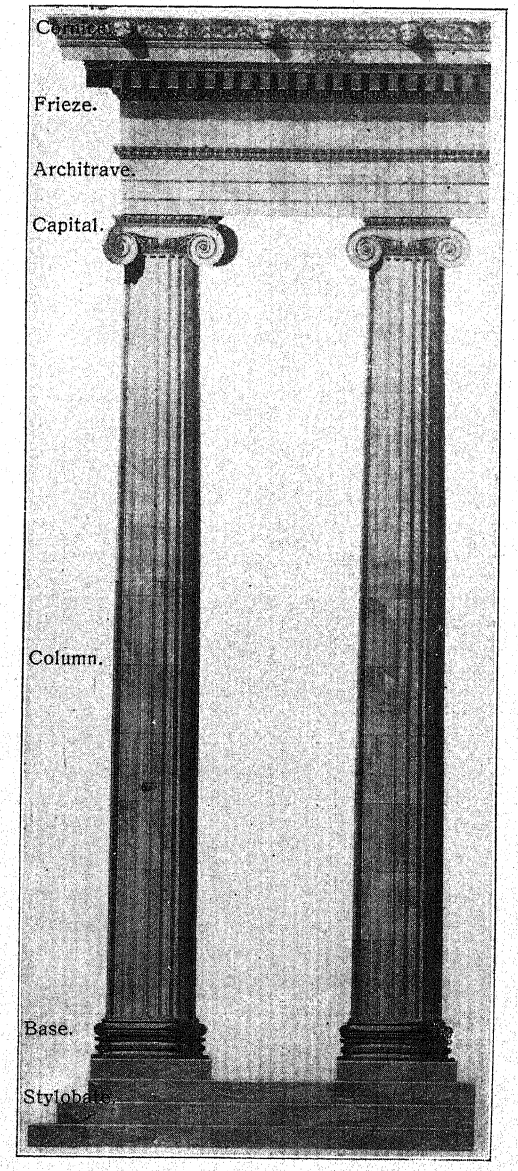


Fig. 333. — Scheme of the Ionic order.

The second style, more favored by the Asiatic Greeks, is called the Ionic

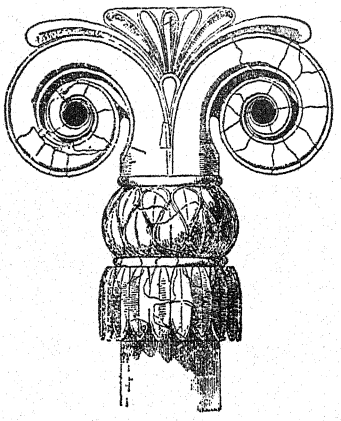


Fig. 334. — Early Ionic capital of Neandria.

order (fig. 333). Here also the temple stands upon a base or stylobate. The shaft of the column however does not bear directly upon the floor, but upon a base which is embellished by a series of mouldings.

The base of the Ionic column varies considerably. The Alexandrian and Roman writers of architectural treatises, when writing of the Greek orders, insist arbitrarily on the superimposition of three mouldings, two concave called *ogee* and one convex or *scotia*. This is known as the Attic base and is theoretically ascribed to the Ionic order. But in the original temples of Ionia the base is much more complicated and consists of a large number of superimposed mouldings. Sometimes, as in the temple of Ephesus, there is a square pedestal or plinth below the base on which the column rests. The shaft is cylindrical with flutings which are joined by a beveled arrangement and not sharply cut off as in the Doric order. At the upper end of each is a spherical concavity above which is the capital. On the capital there is a band ornamented with the egg-and-arrow or the egg-and-tongue pattern and on each side is a spiral or *volute*. The volutes form the most characteristic feature of the Ionic capital, just as the echinus does in the Doric order.

The entablature resembles that of the Doric style in its general outline, but is somewhat lighter and more varied in its details. The architrave is not plain, but is divided into three overlapping horizontal bands. The frieze is not divided

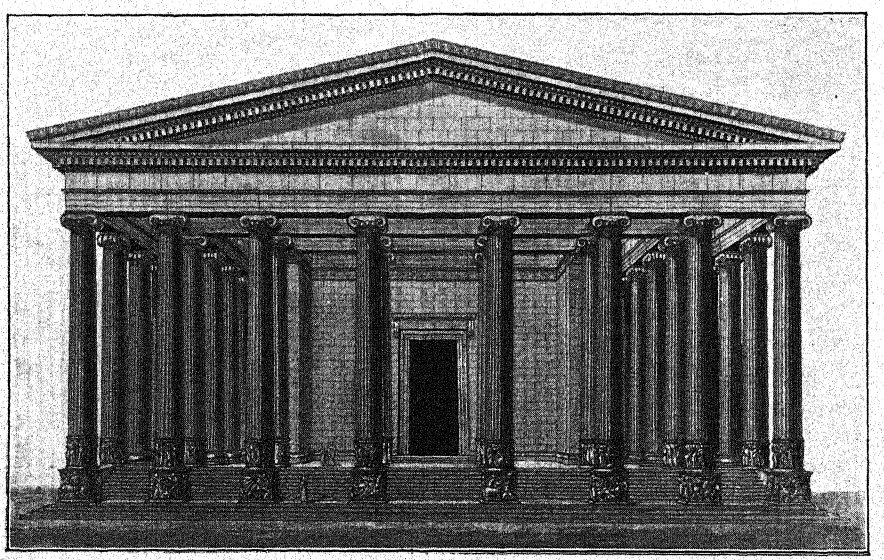


Fig. 335. — Restoration of the temple of Ephesus.

geometrically into metopes and triglyphs, but is an open zone along which the sculptured decoration extends freely. The cornice projects less than in the Doric order and its characteristic features are the dentils and the egg-and-arrow and the egg-and-tongue moulding. The cymatium is always of stone and ends in a gola carved with the palmette, otherwise known as the honeysuckle pattern.

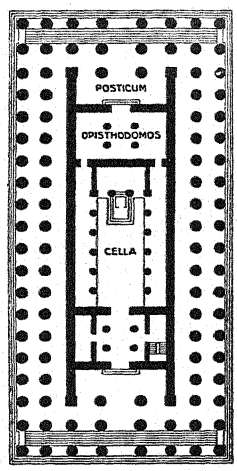
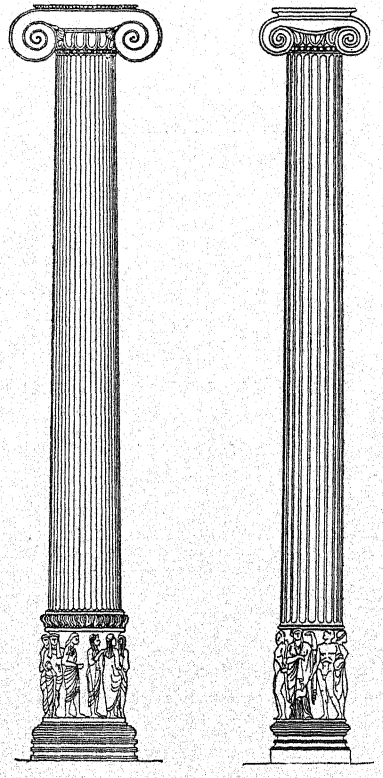


Fig. 336. — Plan of the temple of Ephesus.

We know little yet about the origin of this second Greek style, but it could not have been the pre-Hellenic megaron which evolved into the Doric. There are no early examples to show us its primitive forms or indicate the course of its development. The capital with its volutes is Oriental; we see it freely used in many Assyrian reliefs and it is also found in Cyprus and Phoenicia. The more primitive volutes of this style are very simple; the spiral has but few turns, as in the Oriental capitals mentioned. In an early Ionic temple discovered in Neandria, a number of capitals were found in which the volutes were but slightly curled and were supposed to have rested on a pleasing arrangement of leaves, much like Persian columns (fig. 334).

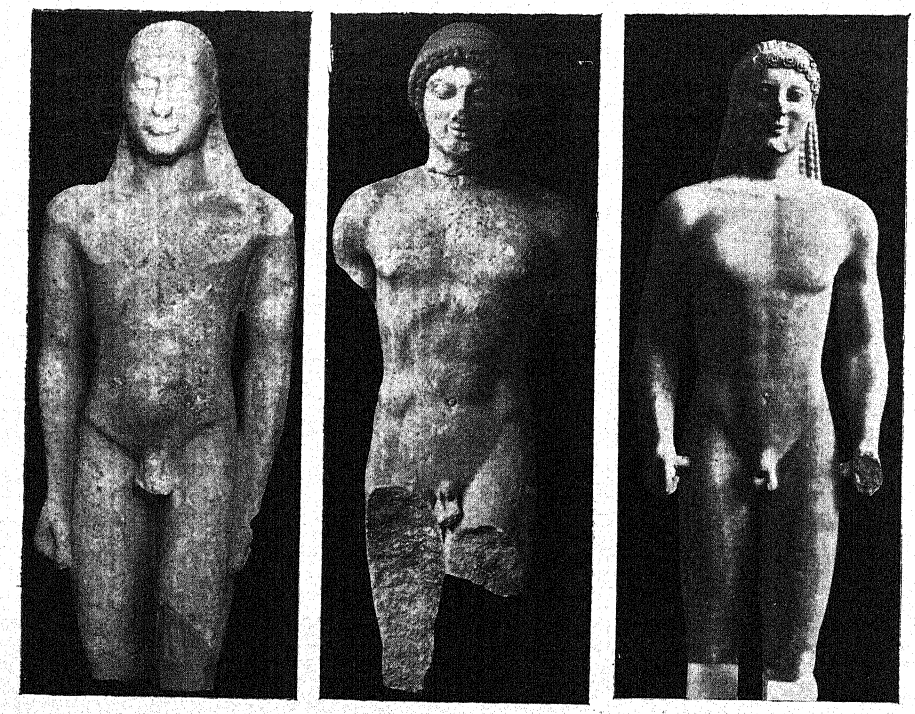
This Neandrian column now appears to have been badly restored. Today it is believed that two capitals have been superimposed; and that the one with the volutes belonged to the outer columns, and the other with its collar of leaves, to the inner ones. In any case both of these forms are absolutely Oriental and foreign to pre-Hellenic Greek art.

Some of the Ionic temples of Asia are peculiarly arranged with an open court like those of the Semitic peoples. These were of colossal dimensions; that of Ephesus had a double row of columns (figs. 335 and 336). This ancient temple was burned and was restored in the 4th century B.C., but excavations have brought to light fragments of the original construction.



Figs. 337 & 338. — Columns of the original temple of Ephesus and of its restoration in the 4th century B.C.

The evolution of the Ionic style



Figs. 339, 340 & 341. — Athletes of the type called the Archaic Apollo, from the temple of Apollo Ptoi in Boeotia. *(Museum of Athens.)*

was much like that of the Doric. It is curious to compare the columns of the original temple of Ephesus (fig. 337) with the ones constructed for its restoration in the 4th century B.C. (fig. 338); the columns are more slender and the capitals more delicate. Neither of these styles covers a definite geographical area, although each was confined at first to the region of its origin. After the Persian War, the Ionic order was adopted by the Greeks of the mainland and some Doric temples were built in Asia. The enthusiasm of victory united the two peoples and familiarized them with each other's architectural styles. At times the two orders were even combined in the same temple. In the case of the propylaea or monumental gateway of the Acropolis of Athens, the columns of the outer façade are Doric, and those of the inner ones, Ionic. The same combination of both orders is to be found in the temple of Apollo in Phigalia.

While architecture was elaborating the beautiful forms of the Doric and Ionic orders, so precise and nationally characteristic, sculptors were struggling to master the technique requisite to produce the first embryos of the great works which were to follow later. The secret of the unsurpassed beauty achieved by Greek sculpture consists in the manner in which they remained true to type. The sculptors progressed slowly and each generation transmitted its added experience to the next, never deviating from a restricted number of concrete types. The Doric schools of the Greek mainland rather concentrated on the masculine

Colossal statue of enthroned goddess. Archaic Greek work of the 6th century B.C. *(Museum of Berlin.)*

type and labored to interpret the anatomy of the human form in the typical figure of the athlete, a nude youth. First it is rigid and later gains in action by a certain detachment of the legs from the body. This sculptural type of man in the early prime and heyday of his youth and strength, before his body had been marked by the toils of life, was to produce later the marvelous works of Greek sculpture. In the early archaic period it has a grotesque immobility, but it gradually takes on movement and gains in intelligence and expression. Innumerable figures of this type are to be found in modern Greece and in all the museums of Europe. At first they were believed to be representations of Apollo, the youthful god. Now it is thought that these so called archaic Apollos were simply funeral statues, carved for the purpose of setting an athletic figure over a sepulchre as a votive offering (figs. 339, 340, 341 and 342).

Fig. 342.—Archaic Apollo
ATHENS.

This type originated in Egypt. The Greeks were no doubt familiar with the rigid Pharaonic statues, admirably carved from hard stone, which embellished the temples of the Nile valley. These primitive athletes or archaic Apollos progressed perceptibly from one type to the other. The earlier ones are rigid and the torso is little more than smoothed over; the legs are close together and the arms touch the body. Later one foot was stiffly advanced, the entire surface of the soles of both feet touching the ground. It is curious to note that at first the head is immobile and faces the front. The face wears a stereotyped smile which is characteristic and known as the *archaic smile* (fig. 344), the only means these early sculptors had of giving it life and expression. These first athletes have long hair; later the hair is short and is either loosely curled or done in parallel ringlets, as in the beautiful head discovered on the Acropolis of Athens (fig. 342).

Fig. 343.—Statue of Chares from Miletus.
(British Museum.

Although this masculine athletic type is of Egyptian origin, the representation of the seated feminine deity, on the contrary, is derived from another archaic type, that of a male or female figure seated upon a throne. The best known archaic statues of this sort are those of the petty rulers of the Branchidae family, which were set along the avenue which led to the temple of Miletus and are today in the British Museum (fig. 343). The masterpiece of this type of archaic Greek seated figure is the monumental enthroned goddess which was acquired by the Berlin Museum in 1916. (Plate XXXI.) Its origin is unknown. It appeared in Paris during the European war and is possibly from southern Italy. In any case it is a perfect specimen of the Greek sculpture of the 6th century B.C.

Fig. 344.—Head of archaic Apollo. THASOS.

Another feminine type is a draped figure of a fair maiden with long tresses of hair hanging down over her shoulders. This also evolved slowly. The earliest example was discovered in Crete in the ruins of a pre-Hellenic city and is attached to the block of marble from which it was carved (fig. 345). The rudely carved ringlets of hair fall over the shoulders; the waist is tightly laced in the feminine fashion of the pre-Hellenic period. This figure is repeated in a marble statue found in Olympia. The latter is detached from the marble block, but rigidly faces the front (fig. 346). We now come to a famous statue which is almost cylindrical, the Hera of Samos (fig. 347) and the curious votive offering of a certain Nicandria, found in Delos, which can

Fig. 345.—Primitive Greek sculpture. *(Museum of Candia.)*

Fig. 346.—Marble statuette. OLYMPIA.

Fig. 347. — The Hera of Samos. *(Louvre.)*

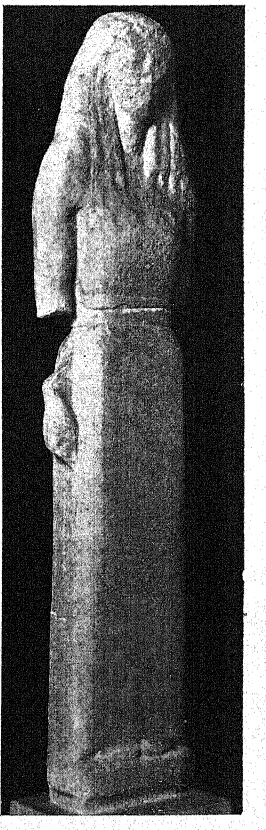


Fig. 348. — Votive offering of Nicandria. DELOS.

Fig. 349. — Archaic girl. *(Acropolis of Athens.)*

be seen to have been a relief figure originally. This large sculptured figure seems to be a carved beam for a profile view shows two parallel planes (fig. 348), and it was evidently intended to be seen only from the front.

At first these draped feminine figures wore only a woollen tunic of the Doric style, but soon the plain undertunic, which is coquettishly lifted with one hand, is supplemented by a mantle which falls in folds over the shoulders, and a flower, a dove or a pomegranate is held in the left hand (fig. 350). There is much of the Ionian grace in these female figures which, in spite of their rigidity, disseminate an indefinable charm in their ensemble (figs. 351 and 352). Many sculptures of this type have been found on the Acropolis of Athens and appear to be votive offerings dedicated by the Athenian maidens to the goddess of the former sanctuary which was destroyed by the Persians. When the Greeks returned after the foreign occupation, they gathered together all the fragments of their mutilated statues and threw them out on a terrace within the precincts of the Acropolis, where they were discovered in the course of the excavations of the last few years. The fragments of these statues are so numerous that their

Fig. 350. — Archaic Venus.
(Museum of Lyons.)

restoration was anything but easy, but enough of them have been pieced together to give us an excellent idea of the type.

At present they form a charming series in the National Museum of Athens, where they are called the *Korai,* or girls, from the Greek word *Korê,* the plural of which is *Korai.* Some of these are so personal in their character that they have been familiarly christened with girls' names as if they were the portrait statues of living girls. The one shown in figure 349 is known as Merry Emma, no doubt because of her golden hair and brown eyes. Her tunic still shows in part its polychrome trimming. It was not only because the Ionians delighted in color that these statues were painted; they were also influenced by traditions of the times when, in the ancient cylindrical xoanon (trunks of trees roughly trimmed into crude human figures), the folds and lesser details were indicated, it is believed, by means of colored lines.

These archaic female figures were the most admirable products of the early art; what they lack in technique is compensated by their frankness and grace. At first they were carved from limestone; later marble was used. One of them, found on the Acropolis of Athens, bears an inscription stating that it was made by Antenor, a famous artist who made the bronze group which Pausanias cites as the paragon of archaic sculpture (fig. 353).

Another *Korê* by Antenor may be represented by a small bronze in the British Museum, which has almost escaped notice in spite of its extraordinary beauty and the fact that it is more typical of the archaic *Korai* than any of the stone figures. (Plate XXXII.) It was probably gilded and encrusted with gold; the eyes still preserve the minute diamonds representing the pupils.

Fig. 351. — Archaic *Korê.*
(Acropolis of Athens.)

These two principal types of early Greek sculpture, the masculine one of the youthful athlete and the feminine one of a girl with a mantle, display certain characteristic features which persist all through the archaic period, that is from the 8th century B.C. when Greek sculpture begins, until the time of Phidias in the 5th. The masculine type shows the interpretation of the nude human figure by dividing it into planes and accentuating the principal lines of the breast, waist and thighs. It is preferably viewed from the front and the action is most symmetrical. One foot, which is advanced, is balanced by the other, which extends slightly to the rear, while the arms maintain the equilibrium of the figure. The feminine type shows plainly that the drapery was interpreted by the lines of the parallel folds which followed the form beneath. At first the body was concealed entirely and the statue was more or less cylindrical. Afterward, on the contrary, the garment was treated in a way most untrue to life, revealing the different parts of the body in an exaggerated manner. The folds of the garment descend vertically and the border is doubled over in such a way as to give it a zigzag outline which is characteristic. Men and women alike have small round skulls, the forehead is shortened and the eyes are almond-shaped and slant slightly. A side view of the eye shows it as it should appear from the front. The usual stereotyped archaic smile is employed to give life and expression to the face.

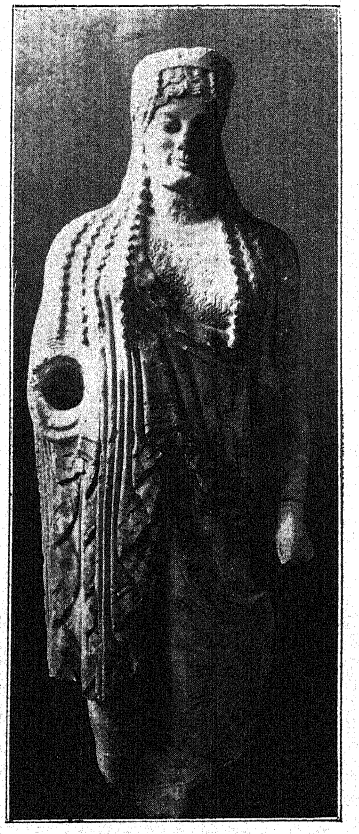


Fig. 352. — Archaic *Korê*. *(Acropolis of Athens.)*

Fig. 353. — *Korê* by Antenor. *(Acropolis of Athens.)*

When these early Greek sculptors desired to show action, their work began to acquire a frankness which is charming. One, Archermus, calling himself the son of Milciades in the inscrip-

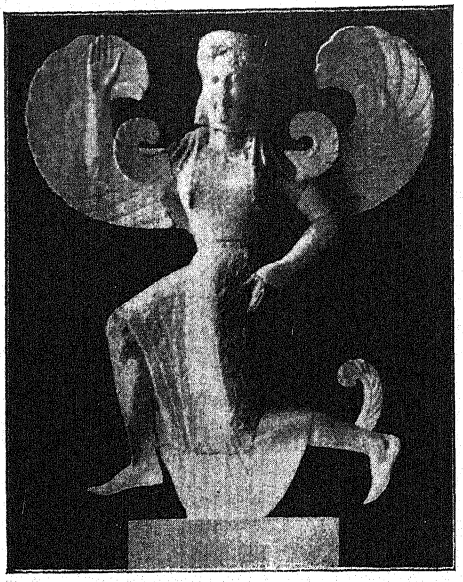


Fig. 354.—The flying Victory of Archermus. DELOS.

Fig. 355. — Flying Victory.
(Museum of Athens.)

tion on the pedestal, proudly inscribed his name as the sculptor of a Nike, or winged Victory, which has been discovered in Delos (fig. 354). The only means Archermus had to indicate that the figure was flying through the air, was to give it a kneeling posture. In this way the feet do not touch the ground and the figure is supported only by the folds of the tunic which graze the pedestal. The wings are spread, the head faces the front as usual and the face wears the characteristic smile which we have already mentioned.

We do not know whether Archermus was the inventor of this type, or whether he merely imitated other more primitive models. In any case, his statue stands today as the first of the series. The type embodied a most fortunate conception and progressed gradually until it grew into the magnificent victory figures of classic Greek art. Figure 355 reproduces a mutilated Victory which is somewhat better than that by Archermus, and a small bronze from the Acropolis of Athens shows still more improvement. The Victory, although in a kneeling posture, lifts her tunic slightly as if to show that she is not supported by it.

There is a masculine type which is not simply that of the athlete. It appears to originate in the magnificent statue known as the Moschophorus, or Calf-carrier, which is in the Museum of Athens. This was also found on the Acropolis. It is carved from the local marble and must have been a votive offering of the period before the Persian War. With all its archaic artlessness, the modelling displays much artistic knowledge. The Moschophorus wears a closely fitting

Bronze statuette incrusted with diamonds and precious metals. Greek work of the 6th century B.C. *(British Museum.)*

garment and the outlines of the muscles are delicately softened by its fine mesh (fig. 357).

This statue is the first of a very promising type. A small bronze from Crete, today in the Museum of Berlin, shows us how a lamb was later substituted for the calf (fig. 356). In the Greek art of Alexandria, this young shepherd with his pet lamb on his shoulders occurs again and again. The type seems to have remained latent from the early days of Greek art until it finally came to represent the Good Shepherd of Christian art. In the first essays of the new Christian art, which began in the catacombs, it was necessary to resort to the old traditional pagan types, and the charming figure of the young shepherd of Alexandria lent itself admirably to the illustration of the parable of the Gospels. We thus see how these early Greek types evolved, not only into those of the classical school, but later on — undergoing conversion to Christianity, we might say, — were often the prototypes of certain forms of mediæval art. We shall see later how the victory figures of Archermus ended by becoming the winged figures of the angels.

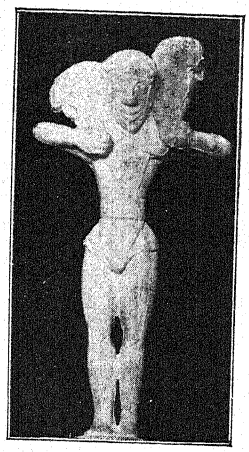


Fig. 356. — Chryophorus. *(Museum of Berlin.)*

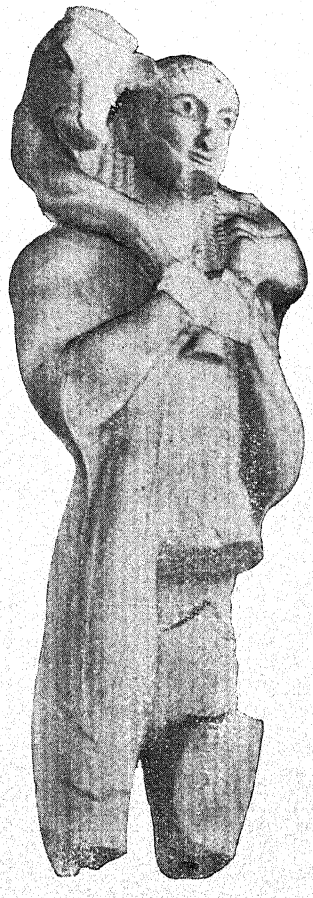


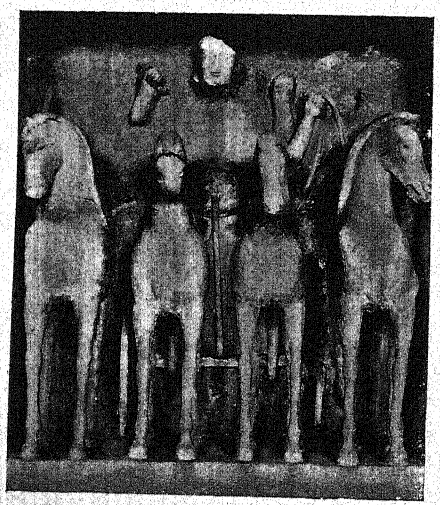
Fig. 357. — Moschophorus. *(Museum of Athens.)*

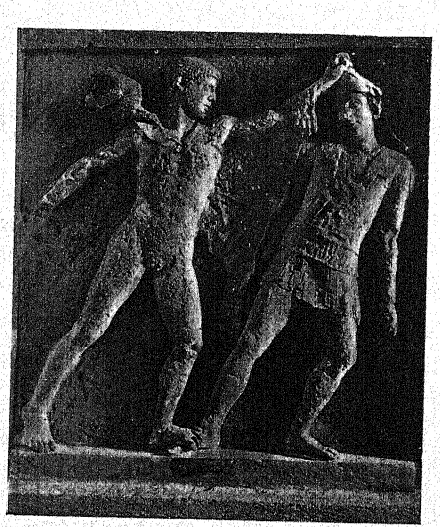
For more than two centuries, from the end of the 8th century until the beginning of the 5th, Greek sculpture made slow progress. Nevertheless it was necessary for the early sculptors to conquer their technical difficulties and give expression to their figures, because their work was required for the decoration of the great monumental art which was rapidly developing its most perfect types. The temples needed sculptured figures for their pediments, and reliefs for their metopes and friezes. It is therefore very interesting to note the reliefs representing horsemen in the frieze of a primitive temple discovered a short time ago at Poinia, in the island of Crete (fig. 358).

The metopes of the temples of Selinus in Sicily are also interesting. For a long time these were the first archaic sculptures known. Before excavations had revealed the existence of the archaic schools of Greece, much interest was excited by these Dorian sculptors of Sicily who, in spite of their primitive technique, dared attempt a front view of a quadriga or battling groups of heroes (figs. 359 and 360).

Fig. 358. — Fragment of an archaic frieze. CRETE.

The first attempts at painting must have been made during this period. We have already seen that polychrome decoration was freely applied to the primitive temples. Possibly some of the traditions of pre-Hellenic painting may have been preserved for we have already seen what an important role the frescoes played in the ancient palaces of Crete and Tiryns. The Greeks themselves believed that their first painters had come from Egypt. The only solid foundation upon which we may base any conjectures is the ceramics. At this time the geometrical decoration of pottery was a complete success. The Dorians seem to have imposed their tastes upon this important industry most positively. The vases are often of gigantic dimensions and have many decorative zones. Their great curved surfaces are covered with geometrical designs, and the horizontal bands are divided into fields like the metopes. Fanciful marine figures, like the cuttle-fish of Minoan art, disappear completely. Only natural forms are represented such as horses, swans and human figures. These are conventionalized into rectilinear outlines and geometrical silhouettes which are often triangular in shape. The bodies are notched so as to form slender waists and are full face. They are black upon a light background. This





Figs. 359 & 360. — Metopes of Selinus. *(Museum of Palermo.)*

pottery has a peculiar style, especially characteristic of Athens, which is called that of the Dipylon because a great many of the vases of this type were found in the cemetery of Athens, just outside the ancient double gate or Dipylon (fig, 361). These were funeral urns, for the burial rites of Mycenae were succeeded during the archaic period by cremation, as the Homeric poems bear witness. The ashes and bones were then deposited in an urn which was surmounted by a miniature tomb.

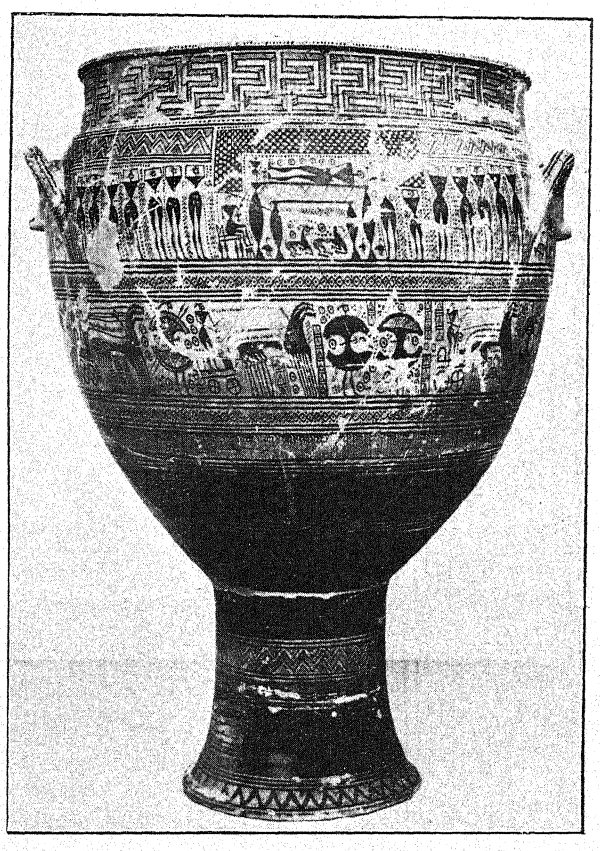


Fig. 361.— Funerary amphor of the so-called Dipylon style. (1,10 m. high.) *(Museum of Athens.)*

In the islands and cities of Ionia the ceramic ornamentation was not so geometrical in character as on the mainland. It is curious that in Athens, a semi-Ionian city, the ceramic style was Doric. It is among the vases of the Dipylon that the most typical examples of geometrical decoration are found.

So we see that Athens, which was the later to produce some of the finest specimens of Greek pottery, vases surpassed nowhere in the world. began with a geometrical style. The more graceful styles of Rhodes and Euboea, on the other hand, did not achieve the same success, and a century later their ceramic ware could no longer compete with that of Attica.

The products of the other industrial arts during the archaic period were decidedly inferior to the magnificent jewels and arms of pre-Hellenic Greece. Nothing found in the cemetery of the Dipylon compares either in technique or taste with the swords from Mycenae or the vases of Vaphio. The bad effects of the Dorian invasion are very evident. And yet it seems likely that the infusion of new blood into the old pre-Hellenic population was necessary to the subsequent development of Greek art. The refinement of Minoan art, which was an aristocratic rather than a popular movement, would never have given to the world such works as the Venus of Praxiteles or the Hercules of Lysippus.

Summary. — At the beginning of the 10th century B.C. the artistic development of Greece suffered an interruption. The ancient pre-Hellenic civilization was strangled by an invasion of northern peoples. The new beginning of Greek culture forms a period to which we give the name archaic. The artistic types of the great classical period were gradually developed. In architecture, the principal building is the temple instead of the palace. The temple is derived from the pre-Hellenic megaron. In the palace of Tiryns, the earliest temple is built upon the ruins of the old assembly hall. The temple is therefore the dwelling place of the deity and has an antechamber like that of the pre-Hellenic megaron. Behind the main hall of the temple is the opisthodomos, a subordinate room connected with the worship. The façade of the temple has two columns, as in the megaron, and is called *in antis;* a portico of four columns is added; when this portico extends around the entire building the façade has six columns. There are two fairly permanent types: one called the Doric, the columns of which have no base and a capital consisting of a simple curved moulding called the *echinus;* the other is the Ionic in which the column has a base, is taller and the capital displays certain spiral decorations called *volutes.* The upper parts of the temple also differ in the two styles. In the Doric order the zone called the *entablature* contains a frieze divided into compartments: the triglyphs and the metopes. In the Ionic order the frieze is ornamented with a relief which extends along it without interruption. Two main types of sculpture appear during the archaic period. The masculine type is the nude figure of an athletic youth favored by the Doric schools, and the feminine is a girl dressed in a tunic and a mantle which is caught up gracefully. The characteristic features of archaic art are the accentuated forms and deep lines in the case of the nude man, and the straight vertical folds and zigzag arrangement of the border of the garments of the female figures; in the heads, the round skulls, almond-shaped eyes and stereotyped smile to give expression are typical. Other secondary types are noted: the seated figure, the shepherd or herdsman with an animal on his shoulders, the flying victory figure, etc. In ceramics the old marine forms give way to a new taste for geometrical patterns which culminates in the Dipylon style of Athens.

Bibliography. — PERROT AND CHIPIEZ: *History of Art,* vol VII. — J. DURM: *Die Baukunst der Griechen,* 1910. — A. FRICKENHAUS: *Tyrins,* 1912. — F. HITHORF: *L'Architecture polychrome chez les Grecs,* 1851. — E. A. GARDNER: *A Handbook of Greek sculpture,* 1896. — O. PUCHSTEIN: *Die ionische Säule,* 1907; *Das ionische Kapitell,* 1881. — R. KOLDEWEY: *Neandria,* 1891. — J. WOOD: *Discoveries of Ephesus,* 1877. — KOLDEWEY and PUCHSTEIN: *Die griechischen Tempel in Unteritalien und Sizilien,* 1899. — KABBADIAS and KAWERAU: *Die Ausgrabungen der Akropolis,* 1885. — H. LECHAT: *Le temple Grec,* 1902. — *La sculpture attique avant Phidias,* 1905. — W. DÉONNA: *Les Apollons archaïques,* 1909. — L. M. COLLIGNON: *Les statues funéraires dans l'art grec,* 1911. — CURTIUS, ERNST and ADLER: *Olympia. Baudenkmäler,* 1892. — O. BENDORFF: *Die Metopen von Selinunt,* 1873 — W. LERMANN: *Altgriechische Plastik,* 1907. — E. LOEWY: *Die griechische Plastik,* 1911. — PERNULL and RIVOLA: *Siziliens antike Denkmäler,* 1905. — P. GRAEF: *Die antiken Vasen der Akropolis zu Athen,* 1909.

Periodicals. — *Journal of Hellenic Studies,* London. — *American Journal of Archaeology.* Princeton. — *Annual of the British School at Athens.* — *Bulletin de Correspondence hellénique.* — *Mitteilungen des deutschen archäologischen Instituts.* Athens. — *Revue archéologique.* — *Revue des études grecques,* Paris. — *Ausonia. Notizie degli Scavi di Antichità,* Roma. — *Jahreshefte des österr. archäologischen Instituts,* Vienna. — *Jahrbuch des kaiserl. deutschen archäologischen Instituts,* Berlin.

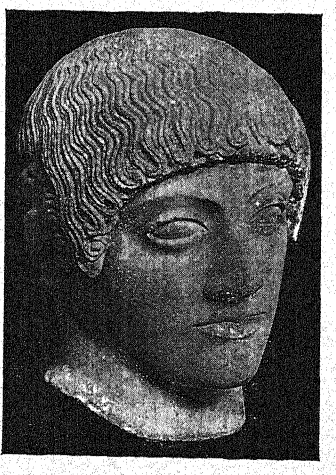


Fig. 362. — Archaic head. ATHENS.

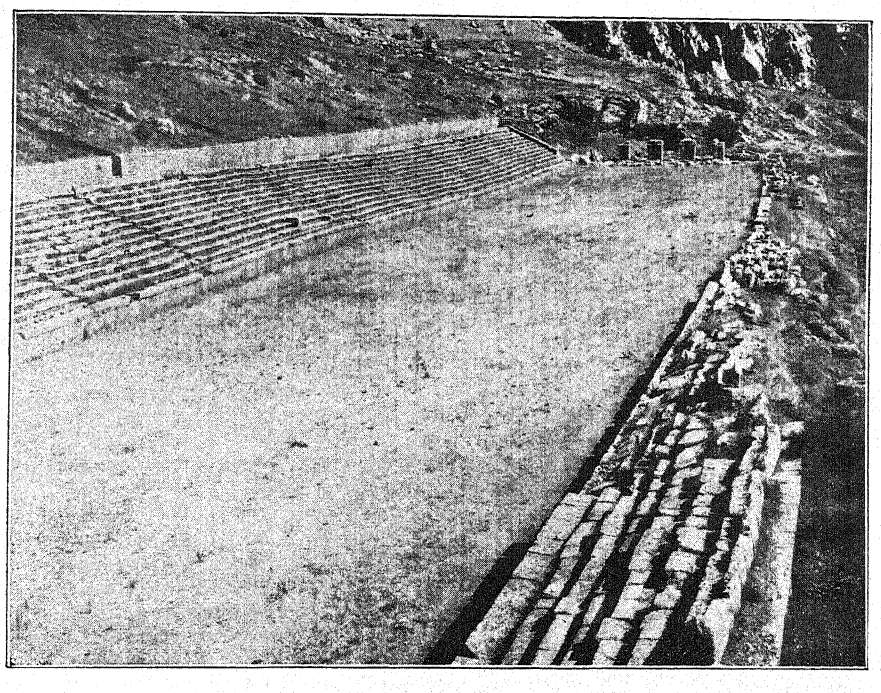


Fig. 363. — Delphi. The stadium after excavation.

CHAPTER XIII

THE GREAT NATIONAL SANCTUARIES: DELPHI AND OLYMPIA. AEGINA. — END OF THE ARCHAIC PERIOD. — MASTER BRONZE-WORKERS. MYRON AND POLYCLEITUS. — PAINTING AND CERAMICS.

In addition to the temples dedicated to the local deities of each city, there were in Greece a number of sacred spots where the piety, common to the entire Greek nation, impelled them to assemble at stated periods. At first the most famous of these were the great national sanctuaries of Delphi and Olympia. At the former, the fissure in the rock was still to be seen, near which Apollo slew the serpent, Python; the latter contained a thousand memorials of the heroic age, chief of which was the tomb of Pelops, a hero held in reverence by all Greeks. Later there was another famous religious centre to which pilgrims repaired in great numbers; this was situated on the Island of Delos, and was also consecrated to Apollo.

In these sacred places, an infinite number of votive monuments were set around the great central temple. These were religious structures and places of recreation. The whole lay within an enclosure, or *peribolos,* which was entered by the *propylea,* or monumental gateways. At Delphi, for example, the via sacra made the ascent of the slope describing an angle and passing among a great

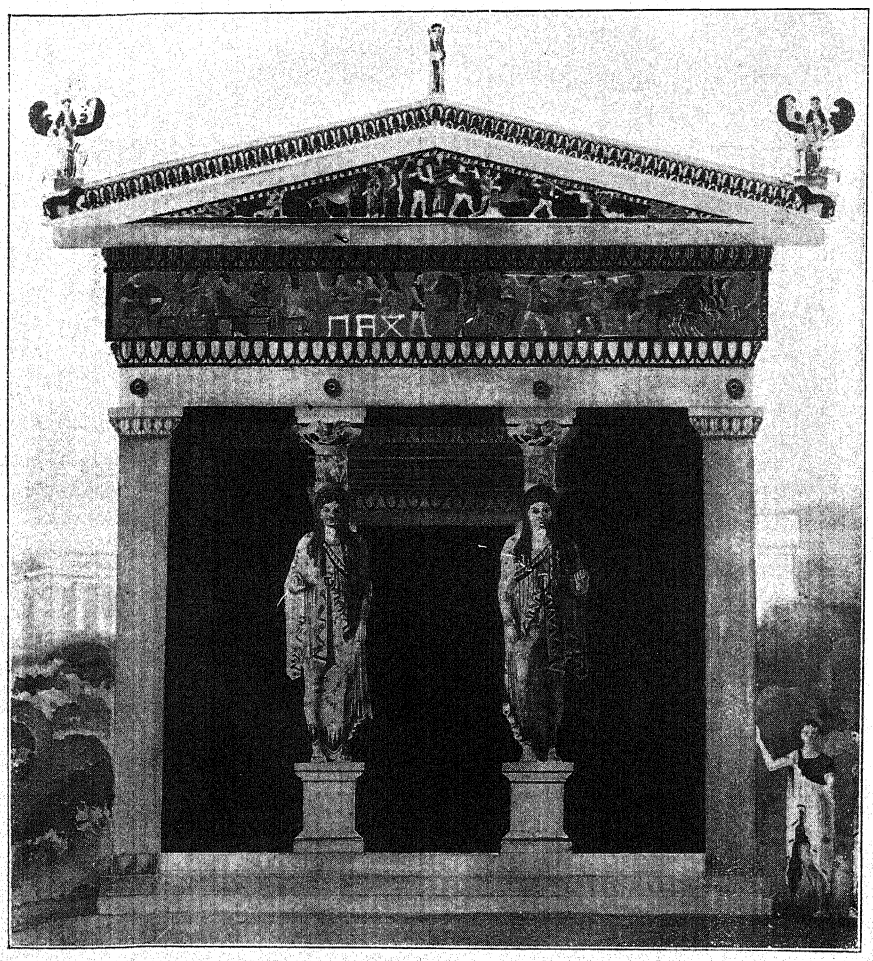


Fig. 364. — Treasury of the city of Cnidus. DELPHI.

number of altars, votive columns and statues dedicated by the cities or their rulers, and, most important of all, small temple buildings of the *in antis* type, called *treasuries*. These last were the property of the various cities and served as depositaries of votive offerings and meeting places for pilgrims from the places to which each belonged, especially during the great religious festivals when so many people gathered within the precincts of the sanctuary. At Delphi, these *treasuries* were not located on the ground according to any formal plan. They utilized the more or less uneven terraces there, for the entire sacred enclosure was set upon the rocky slope of Parnassus, and it was consequently necessary to build upon different levels. The most ancient of these treasuries seem to have been those belonging to Corinth and Sicyon; these date from the beginning of the 6th century B.C. After the Persian War, a noble sentiment of emulation impelled Athens, Thebes, Cnidus, Siphnus and Cyrenae to build their

own treasuries, or municipal chapels, at Delphi. In the course of the excavations made by the French Archaeological School at Athens, these buildings were found to be nearly destroyed, but it was possible to reconstruct some of them. This was the case with the treasury of Athens, which is of the Doric order and extremely beautiful (fig. 320), as also with those of certain Ionian cities of Asia, such as Siphnus and Cnidus, which are partially restored in the Museum (fig. 364). It is interesting to observe how the treasuries of these Ionian cities still preserve their peculiar characteristics. Instead of columns, the architrave is supported by two girls' figures, which resemble the *Korai*. They have the long tresses and flowing mantles, and are coquettishly raising the tunic with one hand, as described in the previous chapter (figure 365). These figures of girls, which serve as columns, are the prototypes of the famous caryatids of the Erechtheum of Athens, which are statues of extreme beauty and are the most important features of that remarkable portico. From these early caryatids of the treasury of Cnidus, we see Greek art progress slowly in the development of its types. The result was the fruit of the tenacious efforts made during three centuries of experimentation. In the case of the little temple or treasury of Cnidus, the angles of the pediments were ornamented with flying victory figures, in a kneeling position, which resembled the Victory of Archermus described in the preceding chapter (fig. 354).

Fig. 365.—Archaic caryatid from the treasury of Siphnus. DELPHI.

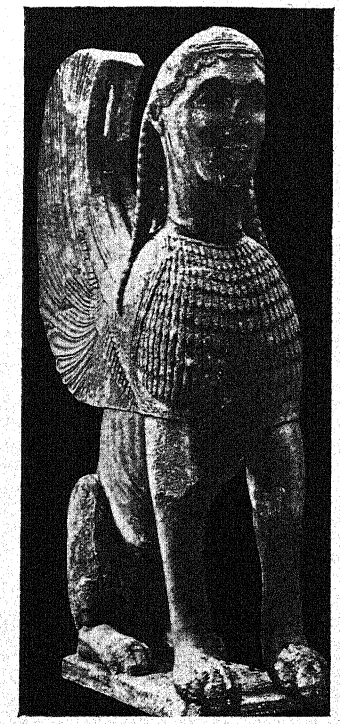


Fig. 366.—Archaic sphinx. Ex-voto of the city of Naxos. DELPHI.

The via sacra of Delphi passed among these small structures and a great number of ex-votos, which bore witness to the piety of the Greeks. These were memorials of the entire history of the

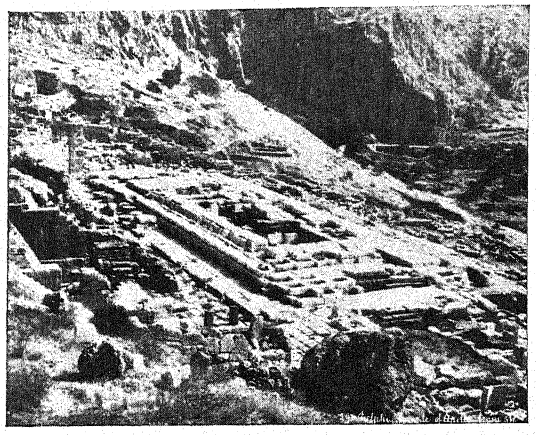


Fig. 367. — Temple of Apollo. DELPHI.

Greek people and of every period of their artistic development, and are now a most valuable source of material for our artistic studies. In the course of these chapters, it will frequently be necessary to cite the various ex-votos of the great sanctuaries, especially those of Delphi. The archaic sphinx, which was erected upon an Ionic column by the citizens of the Island of Naxos, shows how these island peoples carved female monsters in their early schools of sculpture (fig. 366). The Ionic capital of the votive column of the Naxos sphinx is one of the earliest examples of this style. The treasury of Cnidus and the Naxos sphinx indicate clearly that the sanctuary of Apollo, which was one of the great common centres of Greek life, was held in the greatest reverence by the various Ionian peoples as well. The worship at Delphi may have gone back to pre-Hellenic times, for the numerous buildings which grew up about this sacred spot followed the contours of the ground, much as the pre-Hellenic cities do, and above it there is a strong wall of polygonal stone blocks supporting the spacious terrace, which forms the site of the temple of Apollo (fig. 367). This temple was hexastyle and peripteral, that is, it was surrounded by a perystyle. Behind the *cella* was a small chamber or adytum, where the oracle was placed. The temple is the part of the sanctuary of Delphi which is most completely destroyed; the excavations have brought to light only the scantiest remains of its sculptural decoration. The fragments which have been found indicate that the principal pediment was embellished with the portrayal of a combat between gods and giants.

In the upper part of the enclosure, the contour of the rock invited the hewing out of tiers of seats for a theatre, the stage of which faced the narrow portion of the valley. Still higher up outside the walls, on a long natural terrace, was the stadium, used for the games and races (fig. 363). The Greek stadia were long and had tiers of seats on both sides. One end was semicircular, in order to allow the chariots and horses to make the turn more easily; the other end was closed by the façade, which contained five monumental entrances. Down the centre ran the *spina,* a low wall, ornamented with statues, and separating the tracks on either side; of this wall, however, there is not a trace remaining today in the stadium of Delphi. The victorious athletes and racers at these national games, to which the Greeks came from everywhere, had the privilege of commemorating their triumph by dedicating a statue or erecting an inscription on a small monument within the sanctuary enclosure. We can see how the rulers of the Greek states established in Sicily, or the semi-Greek kings of

Cyrenae in Africa, would be most eager to leave a magnificent memorial of their victory, which would accredit them as pure Hellenes and patrons of the national art.

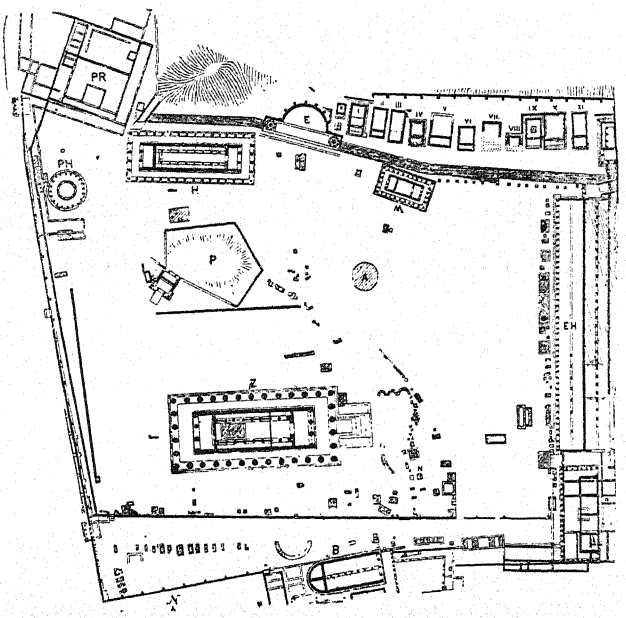


Fig. 368. — Plan of the sacred enclosure. OLYMPIA.

Long before the excavations at Delphi, which did not begin until 1887, the sanctuary of Olympia in the Peloponnesus was explored with great success; as already mentioned, the excavations at Olympia were the beginning of the exploration of the remains of Greek civilization lying buried beneath the soil. The elements composing the sanctuary of Olympia were essentially the same as those of Delphi. It was a much easier matter to lay it out, because here the sacred spot occupied the wooded plain of Elis, watered by the Alpheus, one of those peaceful streams which compose the river system of Greece. The Altis, as the sacred enclosure was called, must have been one of the sites occupied by the ancient pre-Hellenic population. There was a tradition that the very site of the sanctuary was once that of the palace of King Oenomaus, who, when he was beaten in a chariot race with Pelops, gave the latter his own daughter, Hippodamia, to wife. Beneath the remains of the sanctuary, German excavations have laid bare the circular tombs with cupolas, which are characteristic of pre-Hellenic Greece. It is not unlikely that the *megaron* of a pre-Hellenic palace was the first temple of a cult which has been carried on in this valley from the earliest times by the Doric conquerors of the Peloponnesus. We have already seen in the preceding chapter how the ancient Doric temple of Olympia was dedicated to the deity who became later the Juno of the Greek pantheon. Pausanias records the tradition that it was originally built of wood, one of its wooden columns having been preserved up to the Roman period. The excavations have laid bare the groundwork of this temple which is marked H on the general plan (fig. 368). Beside it is seen the altar of Pelops (P), which was surrounded by a balustrade; today it is only a mound of earth. With an orientation the same as that of the former temple of Juno, stood the great temple of Jupiter (Z) which contained the famous statue by Phidias.

The plan of the enclosure is approximately square. In the valley of the Altis, the topographical difficulties did not exist which prevented any formal ar-

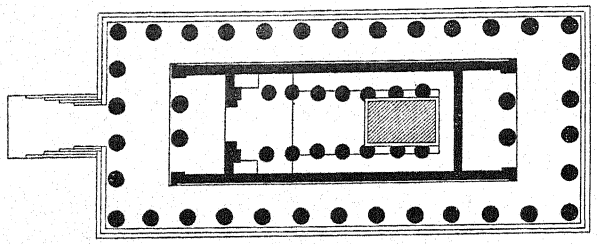


Fig. 369. — Plan of the Temple of Jupiter. OLYMPIA.

rangement of the buildings of Delphi. Here, on the contrary, the treasuries are set in a line, their façades, I, II, III, and IV, forming a sort of street, and facing the interior of the sacred enclosure. The entrance to the stadium was beyond the corner of these treasuries. Here the tali, or slopes, formed by the tiers of seats, are still preserved. The stadium does not appear in our plan, for at Olympia, it was much more completely destroyed than at Delphi. The track was a long one, about two hundred metres in length, and it held approximately forty-five thousand spectators. The Olympian Games, celebrated every four years, were the most famous of the periodical Greek festivals, which accounts for the great number of pedestals found within the precincts of this sanctuary. The dedicatory inscriptions indicate that these pedestals supported statues and ex-votos. The great altar dedicated to Jupiter (A) is to be seen in the midst of these. In the rear was the portico of Echo, which was filled with statues. Here also were other buildings such as the Metroon and the Prytaneum (PR), where distinguished guests were received, and in which there was a chapel dedicated to Hestia, where a fire burned constantly day and night. The small temple (PH) was a building of extreme elegance, the gift of Philip of Macedon in memory of the battle of Chaeronea. The Exedra was the work of the Roman Phil-hellene, Herodes Atticus. There were also many structures of later date outside the temple enclosure.

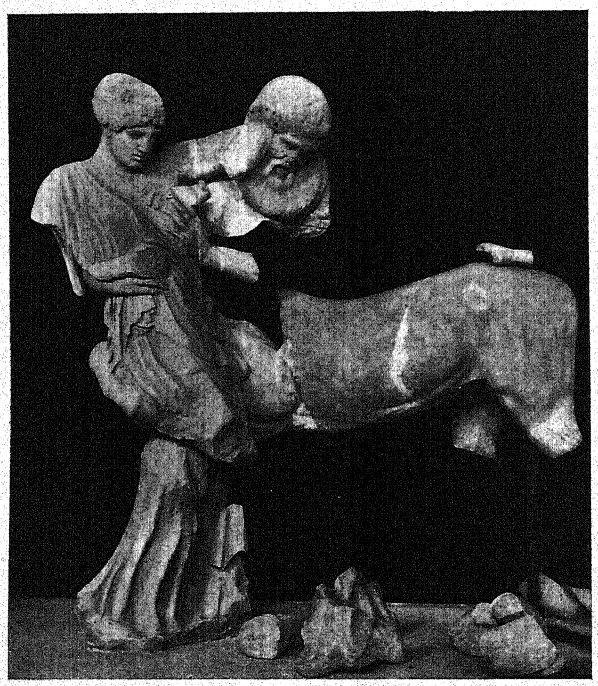
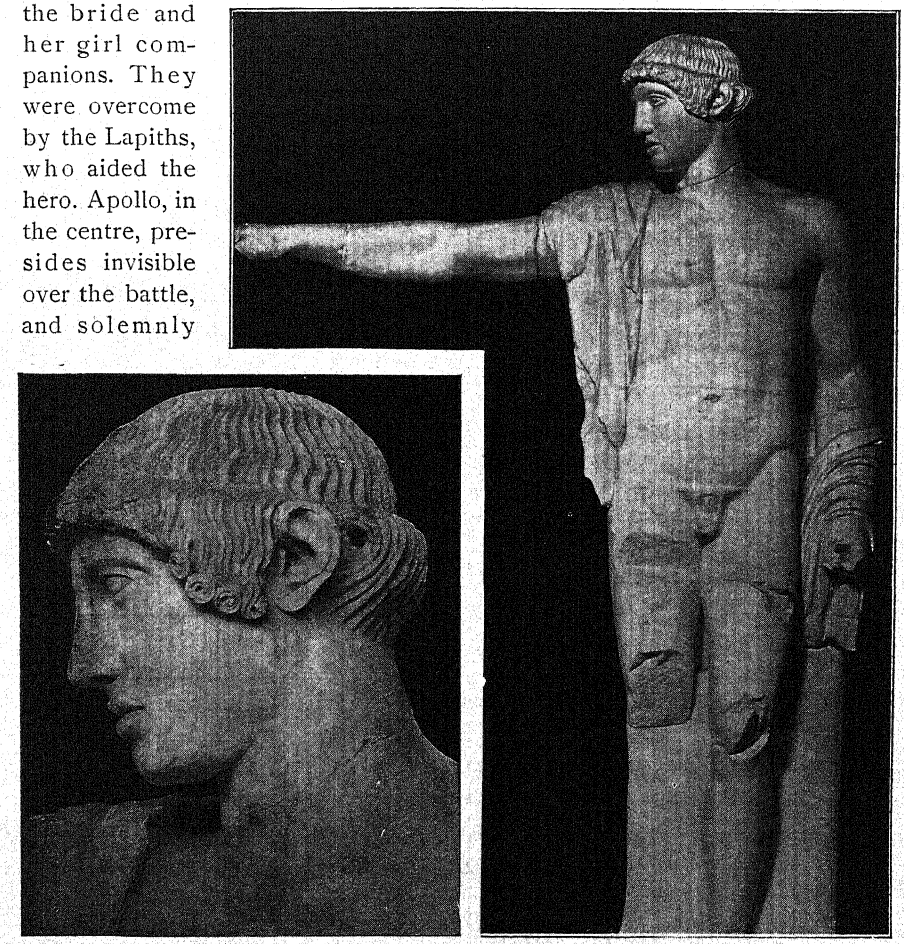


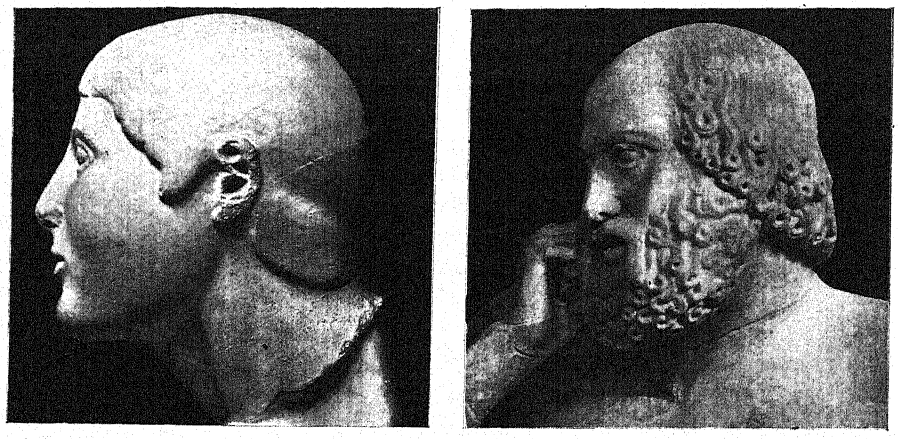
Fig. 370. — Fragment of sculpture from the pediment of the Temple of Jupiter. OLYMPIA.

Two very beautiful and important monumental sculptural groups were executed about the middle of the 5th century B.C. for the

great temple of Olympia, which was dedicated to Jupiter (fig. 369). Pausanias erroneously attributes them to two well known sculptors. He states that the west pediment was decorated by Alcamenes, and the east one by Paeonius. Judging by the existing works of these sculptors, we are led to believe that Pausanias was badly informed by his guides on the occasion of his visit to this sanctuary, for they certainly appear to have been ignorant of the names of the great masters who executed these groups. Two themes are here represented. On the plain of the Altis, it was most natural to commemorate the myth of Pelops. On one side, therefore, we have Pelops and Oenomaus, with Jupiter in the centre. They are making ready to depart in their chariots for the race, in which Hippodamia is to be the victor's prize. She, a pensive figure, is also present at these preparations. On the other pediment, we see the combat which followed the wedding of Peirithous, when the centaur guests violated all the laws of hospitality by attempting to carry off the bride and her girl companions. They were overcome by the Lapiths, who aided the hero. Apollo, in the centre, presides invisible over the battle, and solemnly



Figs. 371 and 372. — The Apollo of the pediment. OLYMPIA.



Figs. 373 and 374. — Heads of figures from the angles of the pediments of the temple at Olympia.

extending his hand, decides the victory. It is interesting to note the figure of a god occupying the central place in the compositions adorning both the pediments of the great temple of Olympia (figs. 371, 372). In these groups, the main difficulty was to fill the acute angles of the pediments; the result, however, is most admirable. In the group representing the preparations for the chariot race of Pelops and Oenomaus, the charioteers alight to make ready the chariots, and a number of minor figures, humble bystanders, no doubt, creep forward, curious to witness the rivalry of heroes and demigods. On the west pediment, with its battle of Lapiths and Centaurs, Apollo, the central god, is the largest figure. There are various scenes of the monsters struggling with the maidens and their defenders, the Lapiths. Servant-maids cower in the angles in order to escape the confusion of the tumult. We see from the sculptures of Olympia that much progress has been made in the art by this time; the action has become far more spirited. The struggling figures of a Centaur and Amazon attracted the attention of Pausanias (fig. 370), who describes both of these famous groups with much detail, although, as has been said, he supposes that the old man reclining in the angle of the pediment is the River Cladeus (fig. 374), while as a matter of fact, the personification of rivers and cities did not appear in Greek art until a much later period. Sometimes Pausanias is rather doubtful about the accuracy of the information, which he received from the official guides. "Pelops' charioteer", he candidly observes, "whom the guides at Olympia call Killas, is named Sapharus in the ancient writings." But he accepts without question the names of Alcamenes and Paeonius as the sculptors of the groups, although it is impossible that such could have been the case. The metopes of the Temple of Jupiter at Olympia are also ornamented with the most beautiful sculptures, representing the myth of the hero Hercules, the favorite of the father of the gods.

Mention has already been made of Delos, another religious centre of the Greeks, although it became important at a later date than did Delphi and Olympia. There also appears to have been a fourth pan-Hellenic sanctuary, the

Fig. 375. — Ruins of the Temple of Aegina.

temple erected upon the highest point of the promontory of the Island of Aegina, dominating the great bay which lies between the peninsulas of Attica and Argolis. The site of this sanctuary is in a magnificent location. Until recently it was believed that it was a temple of Jupiter, but excavations by Furtwaengler have made it clear that it was dedicated to a local deity, the goddess Aphaea, of Cretan origin. Figure 375 shows the present state of this structure, despoiled as it is of the sculptures which belonged to its pediments, although these were still lying about on the ground at the begining of the last century.

According to the restoration of these two groups in the Glyptothek at Munich where the statues now are, both depicted the struggles of a number of warriors around the central figure of a fallen hero. Minerva, invisible to the combatants, presides over the conflict in each group (fig. 376). The former restoration of these pediments along traditional lines has been altered as the result of the excavations of Furtwaengler, who found still more fragments (fig. 377) in the

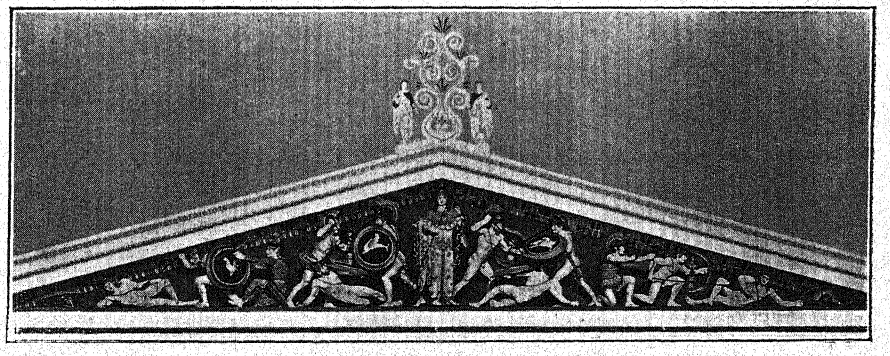


Fig. 376. — Restoration of the pediment of Aegina. *(According to Furtwaengler.)*

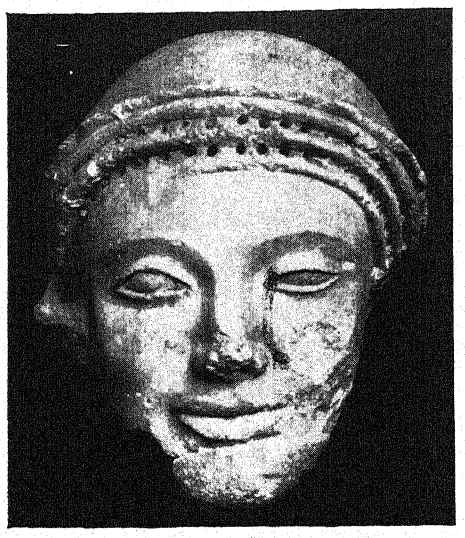


Fig. 377. — Head of an archer from a pediment at Aegina. *(Museum of Munich.)*

temple enclosure, which belonged to these groups and made a new arrangement necessary. Both groups represent battles of Greeks and Trojans, in which the people of the Island of Aegina undoubtedly took a part. One represents the story of Hercules and his king, Telamon, and the other, the war recorded in the Iliad, when the Greeks under Ajax fought beside the Atridae. In these representations of wars with the Trojans, there was a covert allusion to certain other oriental barbarians, the Persians, who had recently been conquered by a coalition of the Greek nations. The people of Aegina had taken an important part in the victory of Salamis and had been awarded the first prize for their efficient aid. It was natural, therefore, that this temple on the highest point of the island, overlooking the very sea where the battle had been fought, should be chosen by the sculptors of Aegina to bear the memorial of the Trojan wars, a symbol of the never ending conflict between Greeks and Orientals.

One of the most interesting things about these sculptures of Aegina is their style. They are carved in marble and are in the full round. As we see them today, separated from their pediment, they may be viewed with advantage from every side (fig. 378). They are executed much as if they had been cast in bronze, an art in which the sculptors of Aegina are said to have been masters. Pausanias seems to have thought that the distinction between the Athenian school and that of Aegina was a matter well known to every one. Nevertheless, a study of the pediments of the temple of Aphaea does not justify such a conclusion. Some

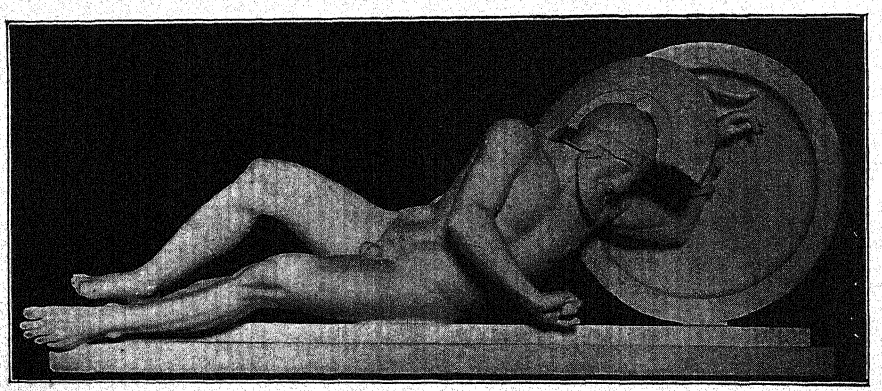


Fig. 378. — Wounded warrior of Aegina. *(Museum of Munich.)*

of the athletic figures forcibly suggest the Doric style; on the other hand, the free action of other characters, such as the archers, indicates an Ionian influence. Minerva's garments fall in rigid parallel folds which recall those of the maidens of Athens, and all the faces wear the stereotyped archaic smile. In any case, the pediment sculptures of Aegina are of the greatest value, indicating, as they do, the transition which took place in Greek art immediately following the Persian War.

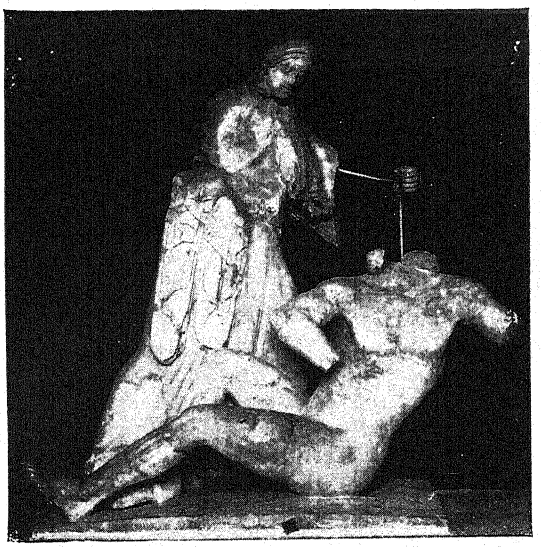


Fig. 379. — Minerva struggling with a giant. *(Acropolis of Athens.)*

The sculptural groups of the pediments of Olympia and Aegina have been thoroughly studied, not only because of the artistic value of the statues of which they are composed, but also because until recently they constituted the earliest known sculptures in which the Greeks attempted to solve the extremely difficult problem of decorating the inconveniently shaped triangular pediment with a group of figures. Today, however, the pediments of Aegina and Olympia do not stand alone in that respect. It is true that in the ancient Temple of Juno at Olympia they did not embellish its triangular pediments in this manner, and the same was true of the Doric temples of Sicily. But they must have contained paintings, and late discoveries have brought to light other cases where primitive sculptures ornamented temple pediments.

Fig. 380. — Fragment of an archaic funeral stela. *(New York.)*

In the course of the excavation of the Acropolis of Athens, remains have been found of the sculptured decoration of two early Doric temples, which had been destroyed by the Persians; these, of course, were

Fig. 381. — Funeral stela. *(Museum of Athens.)*

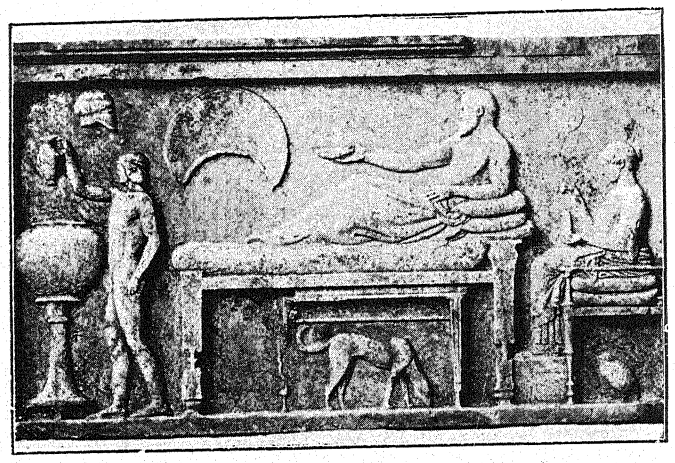


Fig. 382. — Relief from Thasos. *(Museum of Constantinople.)*

older than the sculptures of Aegina. Figure 379 reproduces the central group of one of these pediments, in which we see a combat between gods and giants. Upon another temple of the Acropolis of Athens, there was a representation of Hercules' fight with the monster Typhon, carved in limestone and colored blue and red. The earliest example of a pediment decorated with sculptures is that discovered on the Island of Corfu in the spring of 1911, in the palace grounds of the late German Emperor. Its subject is the combat of Perseus with Medusa, and it is interesting to note that this discovery confirms the literary tradition that the decoration of temple pediments with carved figures was the invention of Corinthian artists, for the archaic style of this work dates from the very period in which Corfu was settled by a Corinthian colony. Some of the smaller archaic treasuries of Delphi had figures on their pediments as well.

It is readily understood that the sculptures required for the temples could not but encourage further development of marble sculpture. In Athens especially, a school of sculpture came into prominence which devoted itself to the execution of funeral stelae, and classical types began to develope from the rude archaic products of this sort. They usually represent scenes taken from ordinary daily life, and often portray the deceased in one of the most important moments of his career. The delightful stela, known as The Soldier of Marathon (fig. 381), may well be the portrait relief of one of those Attic warriors, who with their light equipment brought low the pride of Persia. In another, we see for the first time the figure of the deceased in familiar contact with a domestic animal. Here an old man displays a strip of meat before his dog (fig. 383). We shall see the later development of this type of funeral stelae, representing a child playing with a dove or a rabbit. The relief reproduced in figure 384 is from the Acropolis of Athens, and may once have been part of a frieze of chari-

oteers. Curiously, the tails of the horses are long and thin like those of the frieze of Prinia (fig. 358). The drapery is characteristically archaic, with the folds falling in parallel lines and opening like a fan, and the borders so folded as to form a formal zigzag outline.

More advanced in style and possibly contemporary with the sculptures of the Parthenon, is the beautiful relief found in Eleusis, which portrays the story of the young Triptolemus. The bold youth has descended to the lower regions to seek the precious grain of wheat so necessary to mankind. He now takes his leave of Ceres and Proserpina, the earth goddesses, and one of them places a crown upon his head. Some of the details must have been painted upon the background, and we can well imagine the charming effect produced by this lofty and peaceful composition, before its colors faded. The boy's figure is most artistically executed, and his form is admirably interpreted for such a low relief. The delicate folds of the robes of the goddesses also recall the maidens of the Parthenon frieze, which will be treated in the next chapter. The artist who made this relief from Eleusis must either have been in touch with the school of Phidias, or was at least the immediate precursor of the great sculptor. It is true, the treatment of some of the details is distinctly archaic; the eyes are almond-shaped and flat, Ceres' garments hang rigidly in parallel lines and the hair is conventionally curled (fig. 385). The same qualities give a fine flavor to all the works which, like

Fig. 383.—Funeral stela.
(Museum of Athens.)

Fig. 384.—Archaic relief.
(Acropolis of Athens.)

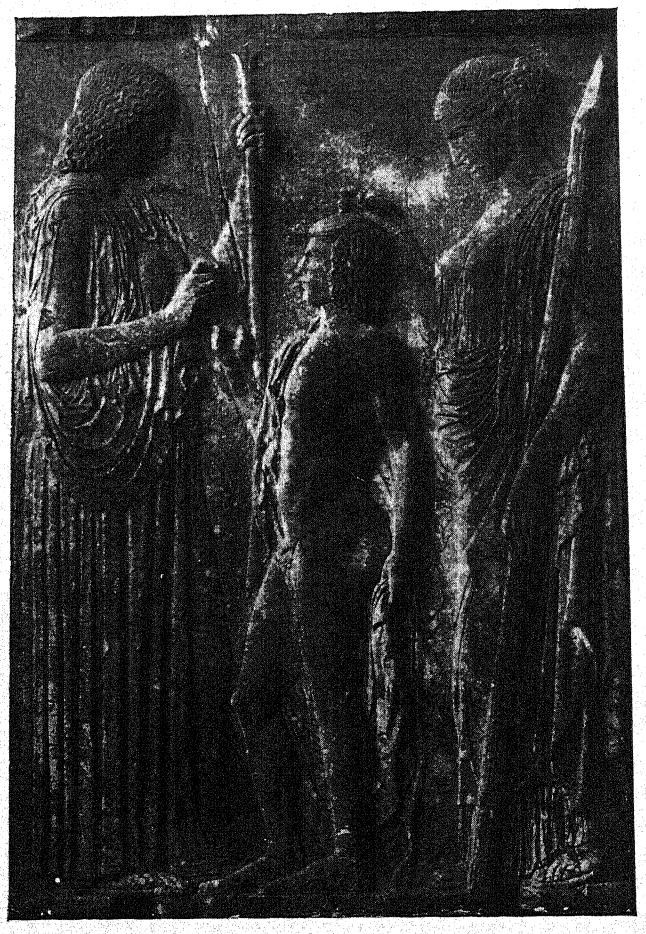


Fig. 335. — Ceres, Proserpina and Triptolemus. ELEUSIS.

the relief of Eleusis, represent the ultimate phase of archaic art. These artists had gained a technique which enabled them to express their feelings, but they were not yet daring enough to display their ability to the utmost.

The preëminent work of the archaic period is the *Ludovisi Throne*, which was discovered in Rome in 1887 when the old Villa Ludovisi was torn down to make room for a new fashionable quarter. It is a block of marble with reliefs on three sides, and carved into a throne or seat. On the back is an excellent relief representing Venus rising from the waves of the sea. Two nymphs on the rocky shore receive the new-born goddess in their arms, and her delicate form displays the freshness and moisture of the sea, and all the youthful beauty of which she was the symbol (fig. 386). Symmetrically arranged reliefs on either side represent what we might call sacred and profane love. One is the veiled wife, zealously tending a lighted lamp; the other is a nude courtezan, given over to music and pleasure (fig. 387). This marvelous piece of work has been a good deal of an enigma until recently; it was difficult to tell whether it was a genuine early production, or one of those excellent imitations of archaic work which were made even as late as the Roman period. But the discovery of another throne, a replica of the Ludovisi (although of less artistic merit), has dissipated all doubts on the subject. This second throne, which is also of marble and dedicated to the goddess of love, was found in Greece, and is now in the possession of the Boston Museum. Its shape is the same as that of the Ludovisi Throne, and there are triangular

PHOTO OF THE AUTOGRAPHIC CO.

Fig. 386. — Birth of Venus. Ludovisi Throne. *(Museum of the Thermae.)* ROME.

spaces on its lower angles also, which are decorated with the honey suckle pattern, with graceful conventionalized floral designs on its back.

While the Athenian sculptors were beginning a school which achieved much elegance in the art of carving marble, the Dorian cities of Argos and Sicyon continued to produce the athletic type of the nude youth. These Doric

Fig. 387. — Lateral reliefs on the Ludovisi Throne. ROME.

figures were more suitable for bronze casts than were the more complicated works of the Ionian sculptors. This explains why literary tradition locates the main centres of the schools of bronze-workers in Aegina and the Peloponnesus. The athletic figures were interpreted by simple lines and broad planes, and their anatomical structure was plainly defined. The maidens were dressed in a tunic, almost cylindrical in form, and the peplum had few folds. Both creations were much more easily cast in bronze than the curly haired *Korai*, with their mantles flowing in graceful folds. We know that a Dorian sculptor named Ageladas cast a group of prisoners of war and horses for the sanctuary of Delphi, for which the people of Tarentum made payment. Onatas, another bronze-worker, produced a number of the famous statues of Olympia. The group of Harmodius and Aristogiton, called *the two tyrannicides*, dates from the period shortly after the Persian War. This was set on the Acropolis of Athens and was the work of Critias and Nesiotes, two famous sculptors of the time. This well known group has come down to us only in the shape of a badly mutilated Roman copy in marble, now in the possession of the Museum of Naples. With the aid of other copies of the heads, which were found elsewhere, the group has been restored as shown in figure 388. This work, which must have been the result of an unusual effort for that time, was already regarded as antiquated and lifeless during the Roman period. Lucian says that sculptors should not imitate such stolid orators... as the statues of Critias and Nesiotes, which are rigid, immobile and of angular contour also... We do, however, possess a number of bronze works of this style, which are an excellent proof of the perfection attained by the sculptors and bronze-workers of the Peloponnesus. One of these is the small archaic head in the Museum of Athens (fig. 389), which was possibly a portrait head; the other is the complete figure of a chariot-driver found at Delphi. This may have belonged to the quadriga presented by Hiero, tyrant of Syracuse, and was the work of the school of Pythagoras of Rhegium; this work was still famous at the time of the Christian Era. Tatian mentions the two statues of Eteocles and Polynices,

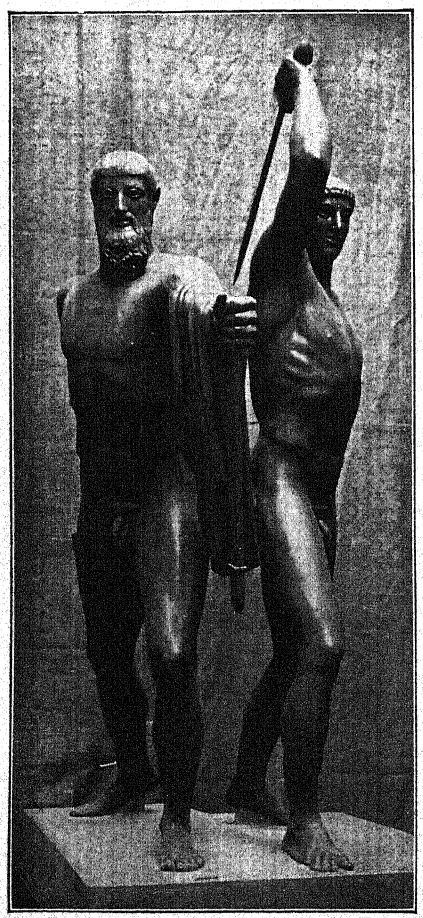


Fig. 388. — Restoration of the group of the tyrannicides.

Fig. 389.—Archaic bronze. *(Museum of Athens.)*

Fig. 390.—Head of the Charioteer of Delphi.

which he expressed the wish to annihilate, together with the memory of their creator. Fortunately his imprecations were not rewarded with the destruction of the magnificent bronze charioteer of Delphi, which was restored to the world in the course of the excavations made at that place. It is true, the figure is rigid, the feet are set flatly upon the ground, and the treatment of the body and its posture also is not precisely what we would call subtile. The folds of the garment fall in straight parallel lines, and the round skull betrays its Doric origin. Nevertheless, notwithstanding its simple style, severe technique and utter lack of any ease of manner, it possesses a beauty and noble dignity well worthy of our admiration. The charioteer of Delphi is surely one of the most beautiful statues of all time (figs. 390 and 391).

One thing which contributes to the great esthetic effect of the charioteer of Delphi is the clever simplification of its form; the extreme simplicity of its lines adapts it admirably to the technique of bronze-work. The metal could easily run down the cylinder of folds, which constitutes a considerable part of the figure; and it can readily be seen that the fusion offered no dificulties; it was like the perfectly natural birth of a new being. The spectator finds it difficult to account for the pleasure he receives from its indefinable charm, and he can only think of it as having been cast or moulded. If it were copied in marble, the body would

Fig. 391.—Statue of the Charioteer of Delphi.

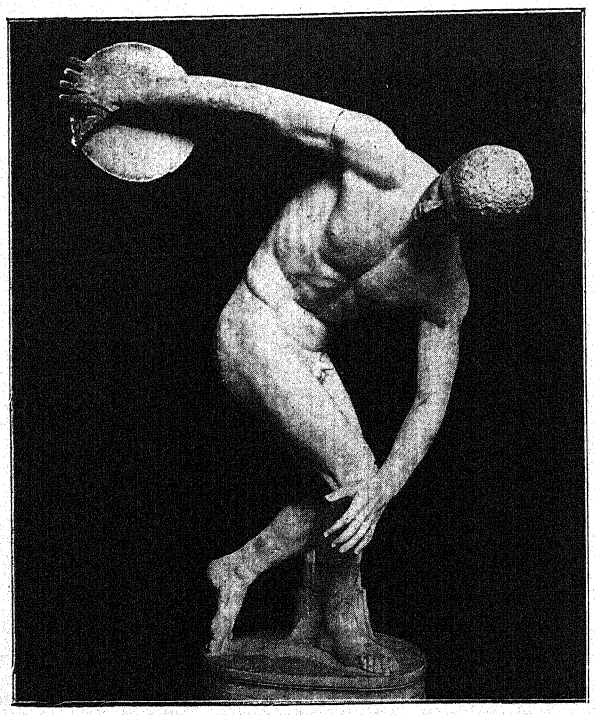


Fig. 392. — The Discobolus by Myron. (Marble copy.)

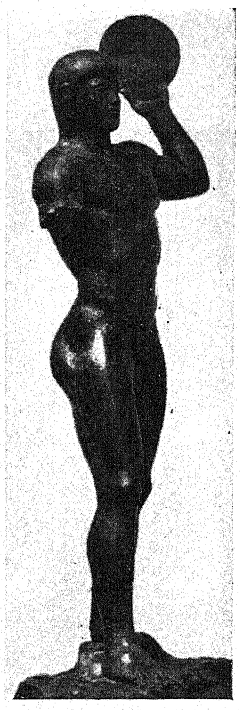
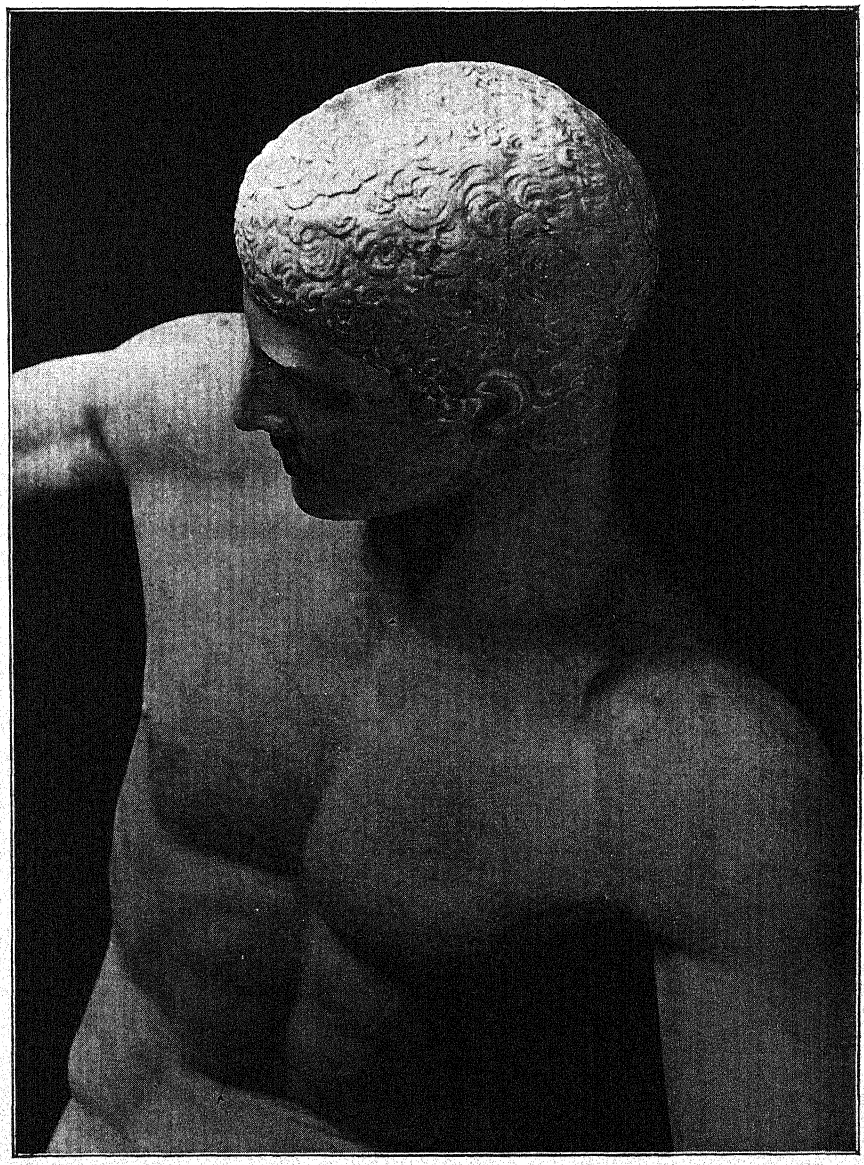


Fig. 393.—Archaic Discobolus.

seem too immobile and lacking in life and expression; as it is, its very rigidity satisfies, and we appreciate the exquisite details of the folds of the flowing tunic and the curling hair on the round head.

To complete the picture of the evolution of the archaic art, we now come to two great and famous masters, who maintained the traditions of the early schools in spite of their vigorous personality. These were Myron, the bronze-worker, and Polycleitus of Sicyon, who was later taken as an academic model. Considering Myron first, his personality is so marked that connoisseurs, judging by certain details of his work, until recently placed him at a much later period than that to which he really belonged. He is the artist of movement; the later sculptors never surpassed the impetuous actions of his figures. He applied all his efforts to the solution of the problem of making his subjects leap, move and run. Expression and psychology, as well as the individuality of his figures, were a secondary matter to him. The ancients said of Myron: *Corporum tenus curiosus, animi sensus non expressit;* meaning that he cared only to give expression to the body, but neglected to study the feelings of the soul. On the other hand it was said: *multiplicasse veritatem.* This seems to indicate that Myron greatly increased the possibilities of the sculpture of the human figure by reproducing it at a moment of unusual activity. To do this, he was obliged to take advantage of the technique of bronze casting, which permitted him to give to his metal figures a position of apparently unstable equilibrium. He surprised his subjects



Head of Myron's Discobolus.

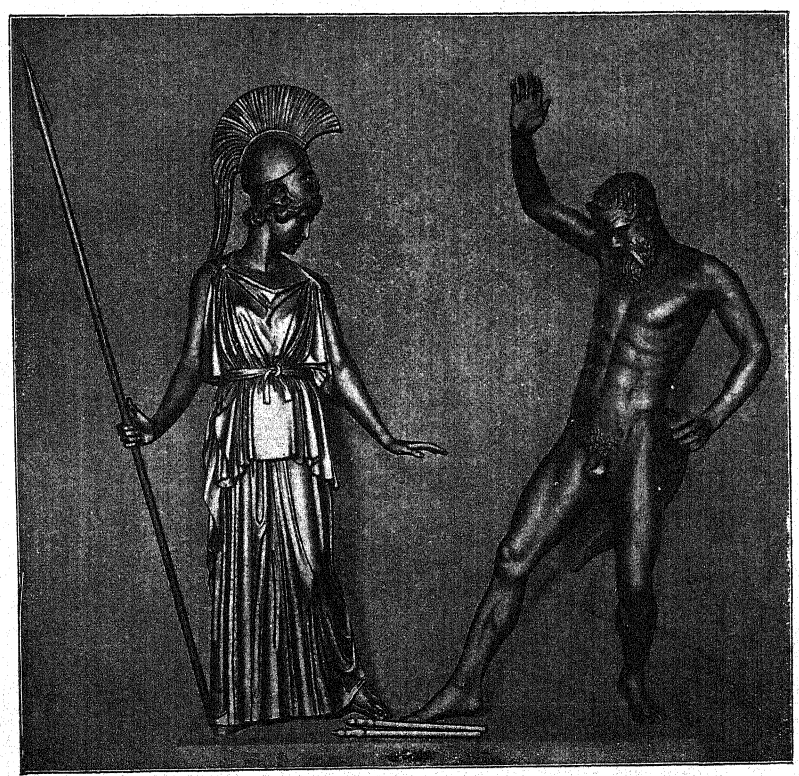


Fig. 394. — Restored group of Minerva and Marsyas by Myron.

in the most violent movements, as in his Discobolus, an athletic youth, in the act of throwing the discus (fig. 392). The entire body inclines forward in order to counteract the force with which he will, a moment later, hurl the discus with his right hand. The left hand rests against the right knee in order to maintain the equilibrium of the body and give more force to the cast. The entire action of the body is concentrated upon this effort to throw the discus. The Roman artisans, who reproduced it in marble, disfigured it with props and supports to sustain the body, which rested entirely upon one foot; but today, when Myron's Discobolus is seen in an art museum, cast again in bronze and without any such artificial support, the spectator is amazed at the spirited movement of this figure.

The head is also most interesting, with its curls in the low relief best suited to a bronze casting and with its round skull. (Plate XXXIII.) It is in the head of the Discobolus that we see most of the archaic features surviving in Myron's great work. It is, of course, only necessary to compare this Discobolus with one of the archaic school (fig. 393) to see the great progress made by Myron's art. The athlete is looking at the discus; all his attention is focussed upon the object which he is about to throw; it is the one instant in the athlete's life when he stakes his very soul on the outcome of the game, to the exclusion of every other

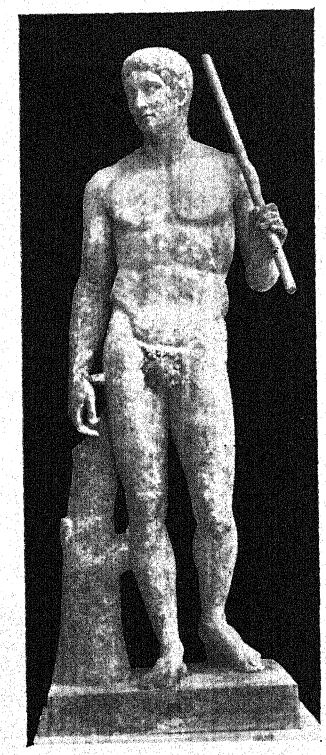


Fig. 395. — The Doryphorus of Polycleitus. *(Vatican.)*

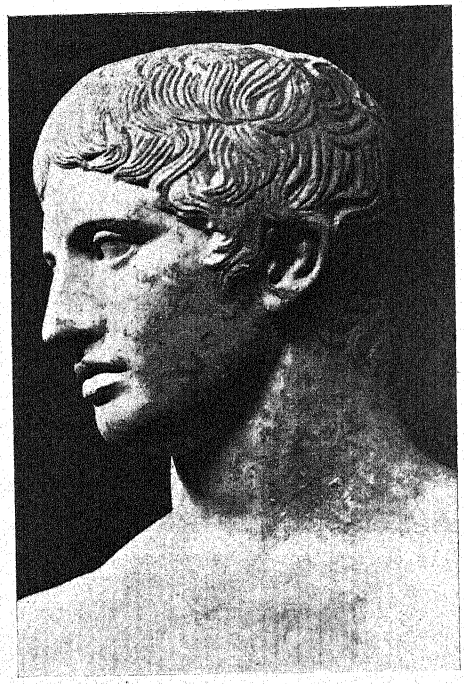
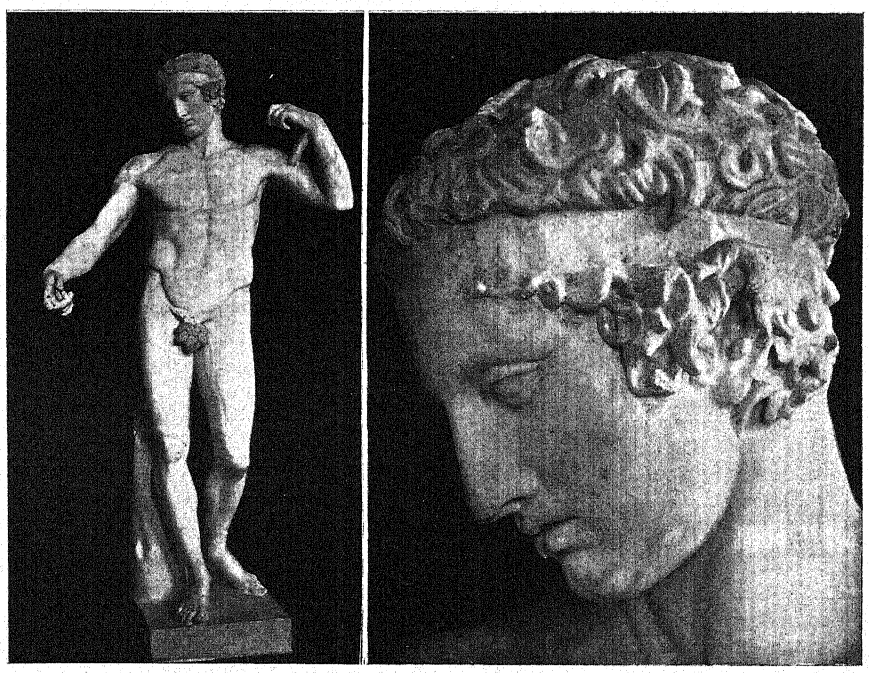


Fig. 396. — Head of another copy of the Doryphorus. *(Museum of Naples.)*

sentiment. The ancients found fault with it for this very reason and went so far as to lose sight of its technical perfection. While some, like Lucian, referred to the Discobolus as a masterpiece, others, Quintilianus among them, scornfully asked: "Could there be anything more artificial and contorted than the Discobolus by Myron?"

This sculptor had a particular affection for primitive natures, who felt rather than thought. This is plainly seen in his delightful group of Minerva and the satyr, Marsyas. The satyr is much amazed at the newly invented flute, belonging to the young goddess. All the surprise of a creature, half human and half brute, is admirably shown in the figure of the satyr (fig. 394). The group has recently been restored by the aid of a cut gem portraying these two figures. The copyists of the Roman period nearly always represented the satyr alone; there is but one copy of the Minerva of this group, that in Frankfort. The goddess is withdrawn to one side, and turns just a little to note what is occurring; the flute, one of six stops, lies on the ground and the satyr capers joyously, like an untamed creature, as he advances to pick it up. His face displays astonished admiration, as he gazes with fascinated eyes upon the invention of the goddess. This explains why Myron, who could catch that which is most sensual and material in the human character, could give such expression to his animal figures. Another of his statues was very famous in ancient times; that was the figure of a cow, which, according to the poets of the anthology, could do everything but moo.



Figs. 397 & 398. — The Diadumenus of Polycleitus. *(Museum of Madrid.)*

Pliny states rather equivocally that Myron carved tombs for a cicada and a locust.

In any case, for the first time in the history of art we encounter an originality in Greek sculpture which went further and accomplished far more than solving difficult problems in technique. Myron was a specialist; to him the most interesting things about man were action, life and physical sensation. Before his time, we find marvelous works of art in Egypt, Greece and the Orient, but they were impersonal social studies; not one artist was able to detach himself from the general characteristics of his own school. Beauty, magnificence and a certain perfection may have been achieved, but no such personal individuality as that of Myron can be found prior to his time. In Greece itself, we know the names of a number of sculptors who inscribed their names upon their work during the preceding centuries, such as Antenor, who carved one of the *Korai*, or Archermus, the creator of the primitive Victory of Delos, but to us these are only names. Myron is the first real personality with which we come in contact. We know little of his life, only that he was a pupil of Ageladas, and that he was very probably a citizen of Athens, as he lived there for many years. It is most evident that he belonged to the Doric school of the archaic bronze-workers. We might be able to form a better idea of his personality if we knew his works that are lost, such as the statue of Jupiter, which is said to have been sent to Rome and placed in an aedicula, or shrine, on the Capitol, which was constructed by Augustus, or if we knew other missing statues of his gods and athletes. In

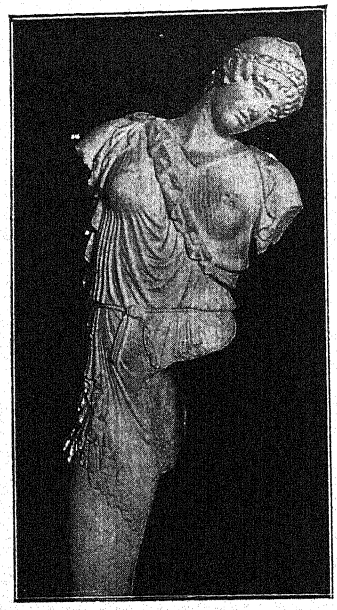


Fig. 399. — Archaic Amazon.
(Museum of Vienna.)

Olympia alone there were four bronzes by Myron, representing as many winners of gymnastic contests.

Another master, famous throughout the ancient world, was Polycleitus of Sicyon. He was the best known of the Dorian artists, and was noted for the austere elegance and athletic beauty of his productions. He was said to have been the pupil of Ageladas, the bronze-worker, but this seems chronologically impossible, although it is true that most of his work was intended to be cast in bronze. His father was also a sculptor, and Polycleitus began his career at a time when the Doric types of the athletic youth and the woman in tunic and peplum had been fully developed. He was, therefore, freed from the technical difficulties of creating these types. His task was to perfect their beauty, and his greatest success was a production, which the ancients called the Canon, or standard. We do not know, for an absolute certainty, which of his statues this Canon was; it has been identified with the so-called Doryphorus, a youth carrying a spear upon his shoulder. This young man has matured physically and his muscles are fully developed; he is no longer the ephebus or immature youth, but the toils of life have not yet disfigured his body, which is as perfect as if it had just emerged from a chrysalis. It is said that the Doryphorus seems sure of himself through the fullness of his strength and by his natural impulse; he has not yet tested his ability, and advances with a frank, open-hearted air, his spear upon his shoulder. This beautiful figure is indeed worthy of all the praise the ancients lavished upon it, for the Canon was looked upon as a model of what the proportions of the ideal human body should be. The measurements of the head are ideally correct; the abdomen and breast are

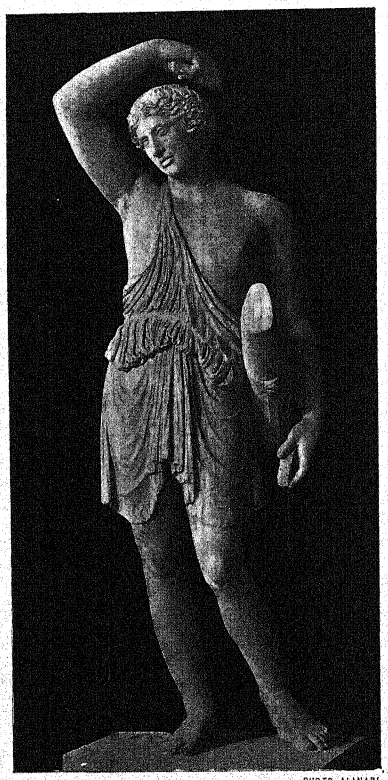


Fig. 400. — Amazon by Polycleitus.
(Museum of the Vatican.)

Fig. 401. — Amazon by Phidias.

Fig. 402. — Amazon by Cresilas.

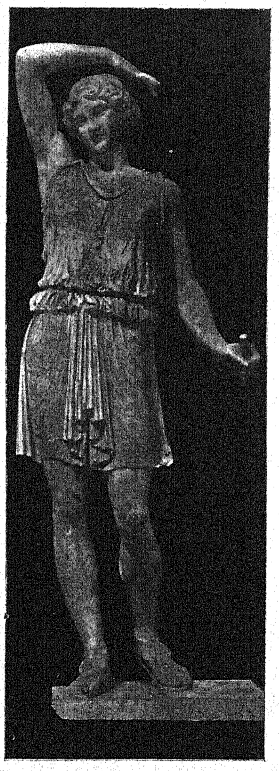


Fig. 403. — Amazon by Phradmon.

perfectly developed, and the arms and legs are of precisely the right length. Nevertheless, this statue possesses a marked flavor of the archaic period; it is somewhat roughly carved, the pectoral muscles are interpreted by planes, and the waist and hips are deeply lined. The action is also rather too precise, with one foot advanced and the other retarded, like the later archaic athletes described in the preceding chapter. It is balanced and symmetrical to a degree that is more studied than natural. Its beauty is the charm of simplicity and proportion, rather than that of expression.

Besides the literary traditions, the very technique of this work shows that it was destined to be cast in bronze. The hair closely follows the round skull, with its parallel curls (fig. 396). Although the marble copies of the Roman artisans are not the work of artists, still the figure preserves its strange charm and, once seen, is never forgotten.

In addition to the Canon, Polycleitus created a number of other works to which the ancient writers have referred, and of two of these a number of marble copies have come down to us. One is his *Diadumenus,* or youth with the fillet. This is another athletic figure, younger than the Doryphorus, represented in the action of winding a fillet about his head, such as the runners of the

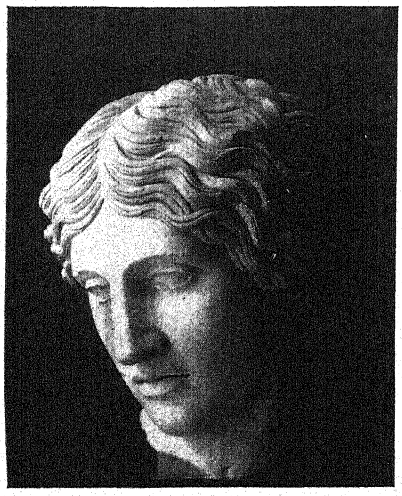


Fig. 404. — Amazon's head, by Cresilas.

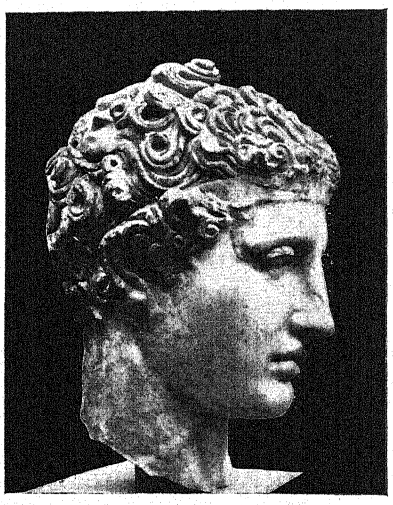


Fig. 405. — Athlete's head, by Cresilas.

stadium used to bind about the veins of their temples. The attitude is an unexpected one and the effect is a delightful figure, with arms raised and body in a restful position, taken in a moment of spirited preparation for the coming contest (figs. 397 and 398). There are many copies of the Diadumenus of Polycleitus, but all are headless with the exception of the one in the Museum of Madrid and one recently found at Delos, also complete. His personality is more individualized than in the case of the Doryphorus. He has that tranquil expression, that often goes with youth, and yet retains all the joy of conscious strength; we see it today in the locker-rooms of our university gymnasiums. The fillet, which he holds in his hands, has not been preserved in the marble copies, but in a bronze reproduction, it would be quite easy to attach the metal band which would supplement the action of this figure. The other statue by Polycleitus, of which numerous copies exist, is an Amazon on foot, dressed in a tunic which hardly covers her breast. The Amazon type is rather melancholy, almost tragic. These beautiful maidens fought heroically, but were invariably conquered. Often they are represented on horseback, or wounded. We have one solitary example of an archaic Amazon, a statue in the Museum of Vienna, which is extremely valuable as it indicates the

Fig. 406. — Head of Juno, by Polycleitus. *(British Museum.)*

Fig. 407. — Coin from Argos with head of Juno by Polycleitus.

early stages of the evolution of this type (fig. 399). Apparently mortally wounded, the Amazon of Vienna is on foot, wears a short tunic with a plain girdle, and her breast is covered with a delicate fabric, the folds of which are arranged in the archaic style.

Fig. 408. — Painted sarcophagus by Clazomenae.

The Amazon by Polycleitus is also on foot and its lines are simple, as would be expected in a figure designed to be cast in bronze. One of the arms may have rested against a pillar; the other is raised above the head (fig. 400). There are variants of this category of Amazons on foot which have come down to us. These are supposed to present four distinct types, corresponding to the four statues made by Polycleitus, Phidias, Cresilas and Phradmon in competition for the Temple of Ephesus. There is an interesting story that the administrators of the temple chose as judges the four sculptors of these Amazons. Each naturally picked out his own as the best, but a vote for second choice was unanimously in favor of Polycleitus. The result, of course, was that Polycleitus won the contest. His type is easily distinguished by the style peculiar to the artist, a symmetry or balance of gesture, and an alternation of movement very characteristic of the great Sicyonian master. This Amazon rests her weight upon one foot, as do the Doryphorus and the Diadumenus; the other foot rests lightly on the ground, giving the figure its balance. To compensate for this, the left arm rests above the head.

Recently the identification of the Amazons of the other three competitors in the Ephesus contest has been practically verified (figs. 401, 402 and 403). All four greatly resemble one another, showing how little desire the Greeks had to vary their artistic types, when these were traditional and highly developed. Thus the Amazon of Cresilas can hardly be distinguished from that of Polycleitus, except that she leans upon her spear (fig. 402), and her face suggests a different personality. The Amazon of Cresilas has a more feminine expression than that of Polycleitus (fig. 404). Besides the Amazon of Cresilas and his portrait statue of Pericles, of which we shall speak later, we have a fragment of his Diadumenus, an admirable head, of which three different antique copies have been preserved (fig. 405). The body of this Diadumenus, however, has not yet been identified.

In contrast to Cresilas and Phidias, Polycleitus represents the Dorian preference for the athletic and severe type. His school at Sicyon in the Peloponn-

Fig. 409. — Painted tablet representing a warrior.
(Museum of Athens.)

nesus, a Dorian country par excellence, opposed the new tendencies of the Athenian school, then in the zenith of its glory, which combined the Ionian sensuousness with the style of western Greece. On the other hand, Polycleitus was always a bronze sculptor, who worked in large planes, accentuated lines, easy movements and round heads with but little expression. On this account he is considered the last of the great archaic sculptors, although sculpture had achieved a high state of perfection in his time. In the temple of Argos, there was a colossal figure of Juno by him. It was cast in precious metals and formed a striking contrast to the great statues of Phidias, an Athenian sculptor who also created admirable statues of the Greek deities of colossal size, which were set up on the Acropolis and at Olympia.

The excavation of the site of the ancient Doric temple at Argos by the American School of Athens, a few years ago, produced but few results. But little was learned of the plan of the building, and neither the figure of the goddess nor any of the statues were found which must have embellished the temple. Waldstein, who directed this work and gave his entire attention to the study of the problem involved, believed that he had discovered a copy of the Juno of Polycleitus in one of the heads in the British Museum (figure 406). A coin from Argos preserves for us the gigantic goddess, crowned with a diadem (fig. 407).

Fig. 410. — Mercury and the three goddesses.
Ceramic decoration.

While sculpture was making this progress in the development of its types, the Greeks were also, though slowly, familiarizing themselves with the technique of painting. It was during this period that they began to decorate large wall surfaces with monumental frescoes, which, according to what descriptions we have, must have consisted of broad bands on which were depicted scenes con-

taining the favorite themes of the Greek artists of the time. There were battles with giants or Amazons, the Trojan War and the like, one following another. We see the same sort of thing on the painted vases of this period, which were divided into horizontal zones and ornamented with such scenes. At Olympia Pausanias saw, and describes at considerable length, a chest adorned with ivory reliefs, representing a large number of scenes of this sort. The mediæval painters and the primitives of the Italian Renaissance used the same method of placing many different scenes side by side. The wall is naively divided into bands oc-

Fig. 411. — The François Vase. *(Museum of Florence.)*
1. Hercules and the wild boar. — 2. Chariot races. — 3. Marriage of Thetis and Peleus. 4. Achilles pursuing Troilus. — 5. Sphinxes, deer and lions.

cupied by the painted compartments, one following another. The background is light colored and the dark figures stand out as they do on the Greek vases.

This ceramic art gives us a good idea of the drawing and the subjects of the compositions of this period. The background is always clay-colored, and the enamel is black. The color scheme of the frescoes was, of course, much brighter, although but few remains of mural decorations by early Greek painters have been preserved. A series of painted terra-cotta sarcophagi, found at Clazomenae, gives us some idea of their favorite color schemes. Here the decoration is not confined to red and black, as on the pottery, but some of the figures are variously colored (fig. 408). We get our best idea of the beauty achieved by fresco silhouettes from a number of stelae found in Thessaly, which were painted in light colors of uniform shades, as well as from the priceless terra-cotta tablet discovered on the Acropolis of Athens, representing a warrior,

whose name is illegible, but is qualified by the word Kalos, meaning handsome (fig. 409). The body is of a uniform reddish shade and the silhouette is delineated with such elegance that it is perhaps more interesting than other and more perfect work. Some of the painters of the archaic period, who signed their vases, were Amasis, Zeuxis, Nearchus and Clitias. The François vase (fig. 411) was named after its discoverer, Alexandre François, who found it in Chiusi, Italy, but on it we see both the signatures of the painter, Clitias, and that of the potter, Ergotimos, showing that some of their work was sent to Etruria.

Summary. — The Greek sanctuaries were monumental architectural compositions clustering around a great central temple. The most ancient of these are Delphi and Olympia. Delos became important later. Besides the temple, there were the municipal chapels, or treasuries, and a great number of ex-votos, statues and trophies. Excavations at Olympia have brought to light the sculptures from the pediments of the Temple of Jupiter, which are of a severe Doric beauty. The Temple of Aegina was embellished by sculptural compositions on its pediments, revealing a still more severe style, particularly suited to bronze work. Other pediment sculptures were found in excavations on the Acropolis of Athens. The earliest was discovered in Corfu in 1911. A school of bronze-workers flourished at Argos, in the Peloponnesus, which was contemporary with a school of sculptors in marble at Athens. The first great master of bronze work was Ageladas. Polycleitus, Myron and Phidias were pupils of his school. The Discobolus and the incomplete group of Minerva and Marsyas by Myron have come down to us. Of Polycleitus we know the types of the Doryphorus, the Diadumenus and the Amazon, possibly the head of Juno of Argos as well. To the painters of the 6th century and the first half of the 5th were due the temple frescoes, which represented exploits of the Heroic Age in long parallel bands. The same method was followed in the decoration of the early vases, with black silhouetted figures. Something of the colors used in frescoes is learned from the sarcophagi of Clazomenae, and from a number of painted stelae and terra-cotta tablets.

Bibliography. — T. Homolle: *Fouilles de Delphes*, 1902. — W. Dörpfeld: *Olympia Bildwerke*, 1880. — Furtwaengler: *Aegina, das Heiligtum der Aphaia*, 1906. — *Meisterwerke der griechischen Plastik*, 1893. (English translation: *Masterpieces of Greek Sculpture.*) — M. Collignon: *Histoire de la Sculpture grecque*, 1885. — E. Loewy: *Inschriften griechischer Bildhauer*, 1885. — *Storia della scultura greca*, 1911. — A. Joubin: *La sculpture grecque entre les guerres Médiques et l'époque de Périclès*, 1901. — H. Lechat: *La sculpture Attique avant Phidias*, 1905. — J. N. Svoronos: *Das Athenische National Museum*, 1908. — H. Schrader: *Archaische Marmorskulpturen in Acropolis Museum*, 1909. — Ch. Waldstein: *The Argive Hera of Policleitus*, 1901. — M. Collignon: *Les statues funéraires dans l'art grec*, 1911. — P. Paris: *Policleto.* — Furtwaengler-Reichold: *Griechische Vasenmalerei.* — Collignon and Couve: *Catalogue des vases peints du Musée National d'Athènes*, 1902. — E. Pottier: *Vases antiques du Louvre*, 1897.

Fig. 412. — Archaic lion. *(Venetian Arsenal.)*

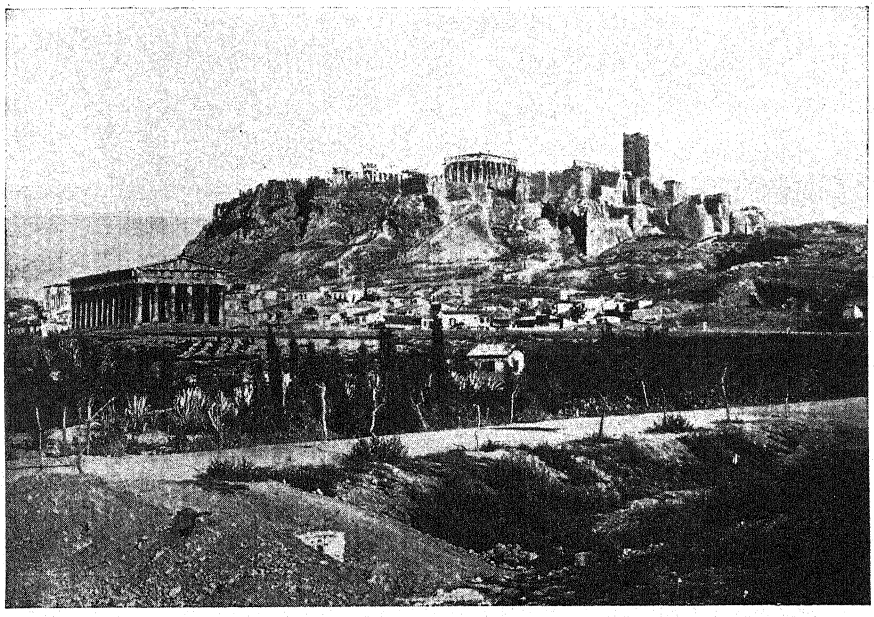


Fig. 413. — The Acropolis of Athens before 1885, showing the mediaeval *Frankish Tower*.

CHAPTER XIV

STRUCTURES ON THE ACROPOLIS OF ATHENS.
PERICLES AND PHIDIAS. — THE PARTHENON. — THE PROPYLAEA. — THE ERECHTHEUM.
THE CORINTHIAN CAPITAL. — ATHENIAN STATUARY OF THE 5TH CENTURY.
POLYGNOTUS AND MONUMENTAL PAINTING.

THE Acropolis of Athens was built upon from pre-Hellenic times. Its top is elongated like that of Tiryns, and it is one of those rocky hills rising from the level plain, on which the Mycenaean rulers often set their palaces. This hill was the legendary dwelling place of a demi-god named Cecrops, who was the son of Earth. He later shared his home with a new arrival, the illustrious and heroic Erechtheus, who was the ancestor of the early kings of Athens. Portions of the old wall are still to be seen in the retaining wall on the south side of the Acropolis, constructed of rudely shaped polygonal blocks of stone, and of the type known as *Cyclopean* or *Pelasgian*. Excavations were commenced in 1885, and during the following decades the entire area of the Acropolis was explored by archaeologists. They dug down to the virgin soil and laid bare other sections of this Pelasgian wall and some remains of the original palace.

Here, as elsewhere, the pre-Hellenic stronghold was abandoned by its masters, and it came to be dedicated exclusively to religious purposes. Minerva came to dwell in the home of Erechtheus, the legendary first king of Athens. Athens was still a city of secondary rank when the Homeric poems

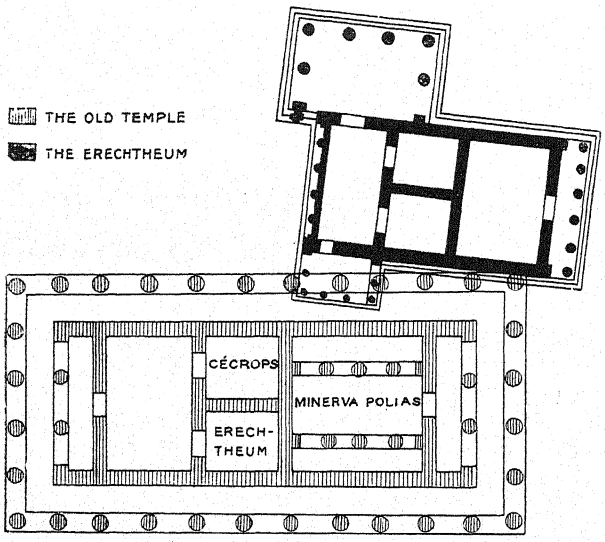


Fig. 414. — Plan of the Erechtheum superimposed over that of the *Old Temple* of the Acropolis.

were compiled in the 9th century B.C., but the temple upon the Acropolis had already acquired quite a reputation, for the Iliad and Odyssey twice refer to these ancient shrines, destroyed by the Persians in later times. In spite of the enormous quantity of sculptural and architectural remains, which were encountered in the course of the excavations, we are still unable to form a definite idea of the general arrangement of the buildings which stood there prior to the Persian War. We are not even certain whether there were a number of temples, or whether the various cults were united in one building, the ancient temple containing several *cellae,* of which the foundations have been uncovered.

When Themistocles foresaw the imminent fall of the city, and counseled the Athenians to abandon their homes, he spoke of two female deities. One of these was to be left on the Acropolis; the other, the famous Minerva Polias, which was an ancient wooden image, was to be carried with them as the sacred palladium which would protect them until their return. In the *Old Temple*, which was discovered by the excavations, Minerva Polias was worshipped together with Cecrops and Erechtheus, for the gods of Athens were tolerant beings and presided together amicably over this city where Dorians and Ionians lived in harmony. The plan of this ancient temple, therefore, has a most peculiar arrangement. On one side, there was the great *cella* with its two rows of columns containing the image of Minerva Polias; on the other, behind an antechamber, the temple was divided lengthwise into two halls, one dedicated to Cecrops and the other to Erechtheus (fig. 414).

When Themistocles and his fellow-citizens returned to Athens, they found the Acropolis a heap of ruins. The votive statues which had embellished the via sacra, and the sculptures of the aedicula lay broken on the ground. The Old Temple of Minerva Polias was razed to the ground by the barbarian invaders. In fact the destruction of this temple was so complete that the Athenians did not have heart to rebuild it. The top of the hill was levelled off anew with the fragments of the destroyed buildings, and the foundations of a new temple were set upon the highest part of the Acropolis, where the Parthenon was afterward

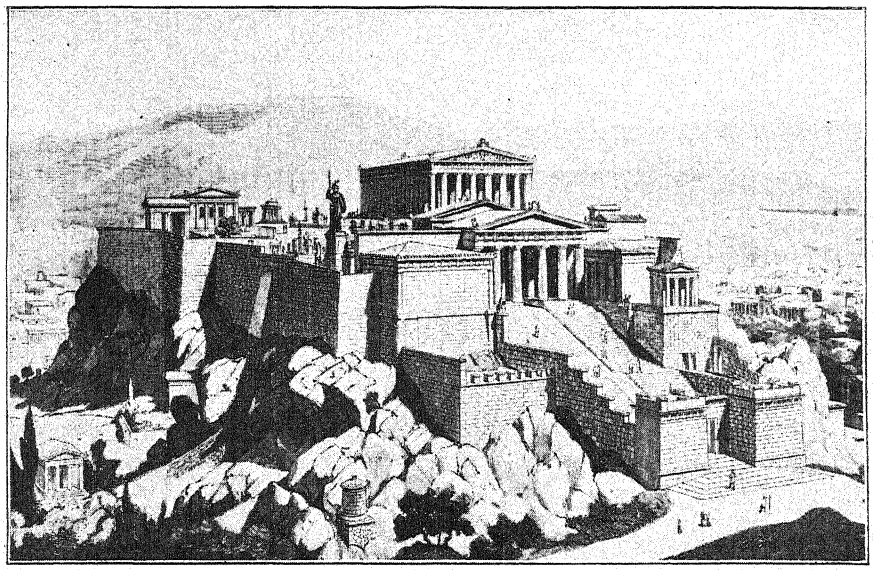


Fig. 415. — Restoration of the Acropolis of Athens.

constructed. Themistocles planned a structure, which was to be one hundred feet long, and was therefore named the Hecatompedon. Its foundations have been identified beneath those of the Parthenon, and its narrower plan was elongated like those of other archaic Doric buildings.

The Hecatompedon was destined to be a failure. Themistocles' project, involving as it did the abandonment of the sacred spot, and placing the sacred image of Minerva Polias on another part of the Acropolis, was badly received by the more conservative and superstitious among the Athenian people. After the fall of Themistocles the work was suspended and a project to rebuild the *Old Temple* was seriously considered under the reactionary government of Cimon. The drums of the columns intended for the Hecatompedon were used as ordinary building stone in the construction of a retaining wall of the Acropolis.

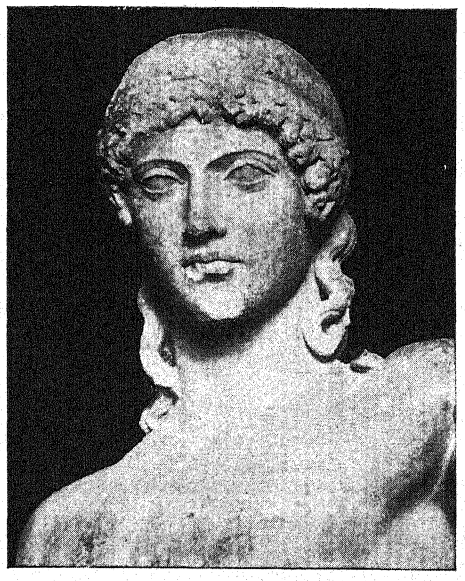
Nevertheless, the site chosen for the Hecatompedon had the advantage of being the highest spot on the Acropolis. After the exile of Cimon, when Pericles took entire control of the government, the idea of rebuilding the *Old Temple* was entirely abandoned, and the plan of Themistocles to change the location of the temple of the goddess was adopted without further hesitation. Plutarch, in his Life of Pericles, dwells insistently upon the liberal spirit and philosophical training of the latter, which caused him to despise the auguries and superstitions of the time as unworthy of belief by a rational mind. This explains why, during the entire period of his rule, there was always a party opposed to the work of construction, both on the Acropolis and in the city. The greatest of these projects was the Parthenon. Plutarch, no doubt, alludes to the popular

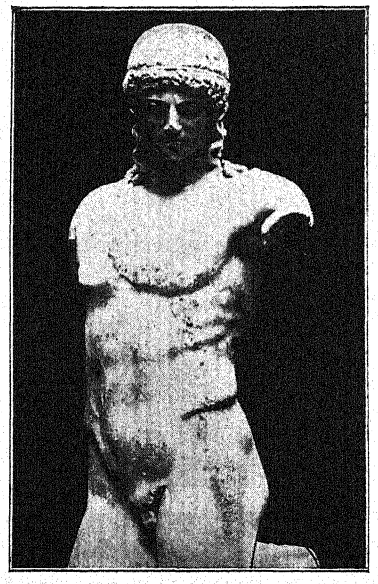
Fig. 416. — The Lemnian Minerva, according to Amelung.

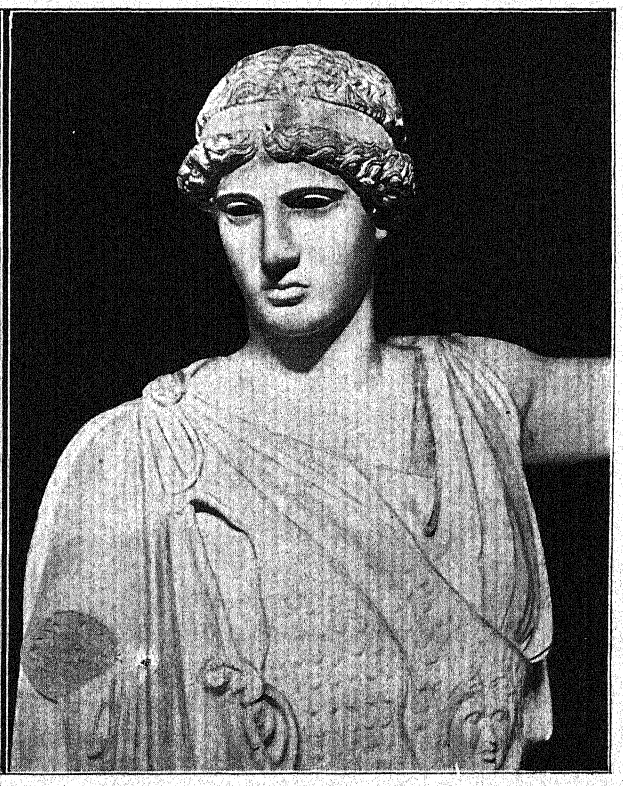
hostility toward the new temple, when he relates the miraculous incident, which proved that the goddess not only did not oppose the work, but actually cooperated in it, thereby greatly increasing the prestige of Pericles. During the construction of the Propylaea, one of the best known artisans, a man highly esteemed by all, fell from a considerable height and was about to die from his fall, when Minerva appeared to Pericles in a dream and prescribed a course of treatment which subsequently resulted in the complete recovery of the workman. This incident plainly shows that there was at first much doubt whether or not the new temple was acceptable to Minerva.

Although he came from one of the most illustrious families of Athens, Pericles treated with the same disdain both the purse-proud aristocracy and the ignorant populace always distrustful of his lofty aspirations. He maintained his supremacy by the strict austerity of his life, taking part personally in all the wars and national crises of his time. Athens finally became accustomed to his superior talents and shared his great passion, a love for the beautiful. Pericles was one of those rare spirits which have a feeling for the esthetic developed to an extraordinary degree. To such a man, beauty becomes a religion, forming his character and stimulating his will.

It was the intention of Pericles to hold a sort of Peace Conference at Athens, at which representatives from the Greek cities would discuss together the best means to restore the temples destroyed by the Persians. Those in authority refused his invitation and from that time Pericles thought only of Athens. This was his fatherland and should be the ideal city, the great intellectual and artistic centre of all Greece, as he himself said, the teacher of Hellas. In order to beautify Athens he committed an act of inconceivable audacity; he took possession of the treasure of the League, which had been deposited on the Island of Delos as a safe spot, neutral to all. These funds had been subscribed for the purpose of continuing the war with the Persians, and Pericles was only able to justify his act by the sophistical argument, that if the Athenians used this money they were in no way obliged to give any account to their allies, so







Earlier works of Phidias. The Apollo of the Tiber and the Minerva of Dresden.

long as they maintained their defence and kept the barbarians from attacking them.

It is easy to see that such an autocratic procedure on the part of Pericles made him still more hated by many of his fellow-citizens. These accused him of causing Athens to betray the trust of the allied cities. Nevertheless, his appeals and the magnitude of his undertakings attracted the most famous Greek artists of the period to Athens. As director general, or strategos, he appointed Phidias, a sculptor already famous for his work. Although he was no longer a young man at this time, he did not belong to the generation which actually resisted the Persian invaders, but he had grown up during the period of patriotic enthusiasm inspired by the memory of those glorious days. At first he had studied painting under Polygnotus, but feeling that he had mistaken his vocation, he went to Argos to learn bronze-work under Ageladas. This was about 470 B.C., and the latter now an old man and at the height of his fame, had already been, it is believed, the teacher of Myron and Polycleitus. With all his shifting from one art to another, Phidias became an able master of the technique of all. His talent was enriched by the methods and discoveries of the Ionian schools of painting, and by the serious aims and careful consideration which characterized the Dorian sculptors of Argos. We know little of his youth and later life, and it is strange that none of the writers of antiquity ever wrote a biography of this greatest artist of all time. What we do know about him has been gathered from the short accounts which we find scattered in works of a general character. Thus, for example, we learn that as a young man, after he had finally decided to become a sculptor, he made a statue of Minerva at Plataea. A statue of Apollo, which was found in the Tiber at Rome, is also ascribed to his earlier period. (Plate XXXIV.)

Fig. 417. — Head of Minerva Parthenos cut on a gem. VIENNA.

Fig. 418. — Minerva Parthenos.

Later he was commissioned by the Athenians of the Island of Lemnos to carve a statue of Minerva, which was placed upon the Acropolis of Athens and known as the *Lemnian Minerva*. This appears to have been somewhat larger than life size and was considered the most beautiful of all his statues. Discerning writers, such as Lucian, gave this work their

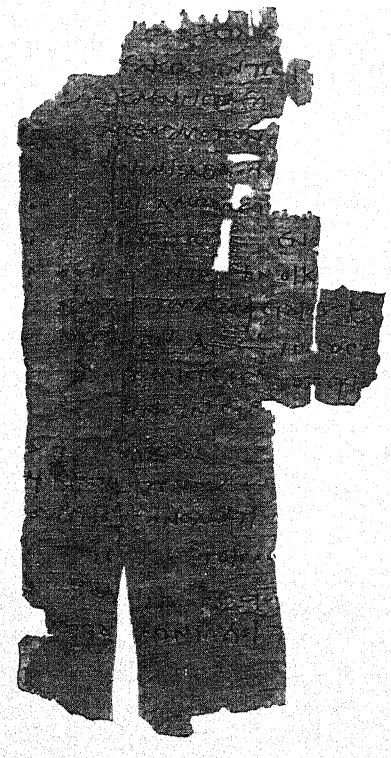


Fig. 419. — Geneva papyrus containing an account of the prosecution of Phidias.

most careful consideration and declared that the *Lemnian* was his masterpiece. Pausanias also said that Phidias' most notable work was the statue of Minerva called the Lemnian after its donors. There is a statue of this goddess in the Museum of Dresden, and a head which fits it exactly is in the Museum of Bologna. These have been identified by Furtwaengler as copies of the Lemnian. However, this identification is now distrusted, for although this beautiful statue may safely be ascribed to the young Phidias, there are reasons for doubting that it is the famous masterpiece known as the Lemnian. (Plate XXXIV.) Amelung insists that its type should be sought in a series of Roman copies of a Phidian statue, and he has proposed to make a beautiful restoration, using the two best preserved copies, now in the patio of the Casa de Pilatos in Seville (fig. 416).

Phidias carved a number of statues of Minerva. After the Lemnia, he was commissioned by Cimon to make a figure of Minerva of heroic size, which was set upon a pedestal in the centre of the Acropolis. Pliny calls this "the great bronze Minerva", but it was better known as the Promachus. Certain Roman coins give us some idea of the warlike pose of this figure. One arm is slightly separated from the body and bears a shield; the other hand is raised and holds a spear. In the general view of the restored Acropolis (fig. 415), we see this great bronze statue standing out on the sky line of the sacred hill. It was probably carried to Constantinople, where it was destroyed by the mob during the uprising of 1203.

A third statue of Minerva by Phidias was also erected on the Acropolis of Athens. This was the great Minerva, made of gold and ivory, which took the place of the old image of Minerva Polias and was placed in the Parthenon. When Pericles appointed Phidias director of the public works of Athens and of the Acropolis, and made him the leader of the illustrious cohort of artists, sculptors and architects, the latter was not content merely to direct the work, but undertook to perform personally the most important task of all, the execution of the statue which was to be the object of worship in the new temple. This building was called the Parthenon, or dwelling place of the virgin, so the statue of Minerva came to be called the Parthenos. Phidias wished to make it entirely of marble, but public opinion compelled the use of gold and ivory. One hand held a Victory, and the other rested upon a shield. Only small copies of this famous statue have come down to us, and these are all of the Roman

period. Such images were very sacred and rather inaccessible, so the copyists did not succeed in making very faithful reproductions. Besides, their imposing majesty was entirely lost when they where copied on a small scale (fig. 418). There is a cut gem in Vienna, which represents the head of the Parthenos with its sphinx-like helmet and lofty crest (fig. 417).

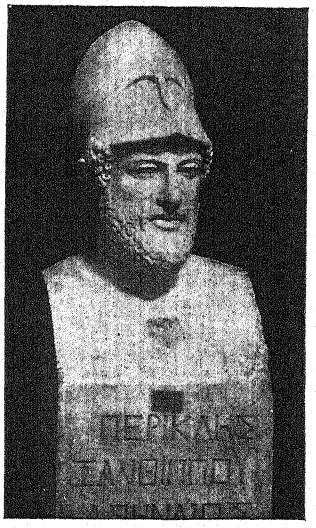


Fig. 420.—Portrait bust of Pericles

Part of the gold and ivory provided for the Parthenos disappeared from the studio of Phidias, and the sculptor was unjustly accused and convicted of its theft. Plutarch and Diodorus say he died in prison, but there is a tradition that he escaped and took refuge in Olympia, where he carved the famous statue of Jupiter, which was the pride of that sanctuary. A fragment of an Athenian chronicle, written upon Egyptian papyrus, was discovered in Geneva a few years ago, which confirms the latter story (fig. 419). A curious detail is added, namely that the Athenians and their associates, possibly the administrators of the sanctuary of Olympia, organized an expedition to the city of Adulis on the Red Sea to purchase ivory for their statues. The Geneva papyrus confirms the fact that Phidias was convicted and sentenced, but adds that, at the intercession of the people of Olympia, the Athenians released him under a bail of forty talents of gold, which the administrators of Olympia furnished in order to procure the services of the great sculptor. We do not know whether Phidias was returned to Athens to die in prison after he completed the statue of Jupiter, or whether he died in Olympia. The latter alternative is suggested by the fact that some of his relatives went to Olympia, where they were entrusted with the important office of guarding the statue of Jupiter.

The prosecution of Phidias was simply an attempt to discredit Pericles. By this attack on the artist, his enemies wished to see how an accusation against the dictator himself would be received by the public. All his life, Pericles was obliged to defend himself from abuse and attacks and was often powerless to prevent the unjust prosecution and conviction of his friends. We have a portrait bust of Pericles by Cresilas, of which a number of copies have been preserved, and in which his energetic character and lofty ideals are revealed (fig. 420). He had an unusually long head, which is concealed by his helmet. Phidias, on the other hand, portrayed himself on the shield of the Minerva Parthenos as an old man, still vigorous, but bald and rather hard featured. These two men, who were the dominating spirits in Athens in the production of so much of the greatest art that humanity has ever achieved, do not seem to have been free from ugliness themselves. Thus, frequently a personal imperfection becomes a stimulation to the individual to achieve the ideal.

Phidias and Pericles transformed Athens from a second rate city into the intellectual and artistic centre of the Greek race. For two centuries Athens was

Fig. 421. — East façade of the Parthenon.

truly the soul of Greece. The movement begun in the middle of the fifth century B.C. lasted all through the fourth. The Parthenon, which was built on the foundations intended for the building planned by Themistocles, was planned anew by Ictinus, an architect in the employ of Pericles. There were eight columns on the front and rear façades and seventeen along each side. A peculiarity of the Parthenon was that behind the great *cella* containing the statue of the goddess there was another hall which formed the opisthodomos and was quite large. It is believed that it was originally intended for the worship of Cecrops and Erechtheus, carried on in the Old Temple, under the same roof with that of Minerva.

The exterior of the Parthenon was built in the Doric style. At the time of its construction the traditional Doric order had reached its highest perfection. The columns of this temple were lengthened so as to produce a delicate effect and have an entasis, or diametrical dilation of only seven inches, thus relieving the rigid effect of the straight lines of the flutings. The entire building is most ingeniously planned and it produces an effect of marvelous perfection. All its lines are slightly curved so as to correct certain disagreable effects which distance and the laws of perspective would otherwise make inevitable. In 1847, the English architect, Penrose, became famous for his discovery of the subtile curves which had been substituted for straight horizontal lines in the outlines of the Parthenon. The nine years from 448 to 437 B.C. were required for the completion of the building. The sculptural decoration was not yet finished when Phidias was imprisoned, and his assistants were obliged to complete this work without his aid, but were held to their task by the iron will of Pericles. The pediments and the metopes were ornamented with sculptures, and on the outer wall of the *cella* inside the colonnade extends a frieze, which, like the Ionic friezes, is uninterrupted. (Plate XXXV.)

Fig. 422. — West façade of the Parthenon.

This decorative composition has come down to us in a very mutilated condition. During the Middle Ages, the temple was transformed into a Christian church. Later it was used as a powder magazine, which exploded during the siege of Athens by the Venetians in 1691. The photographs reproduced in figures 421 and 422 show the great building, broken into two parts. A considerable portion of both the lateral faces was completely destroyed, but less damage was done to the two principal façades. The drums of the columns were projected laterally by the force of the explosion and lie scattered about on the ground. The Acropolis was bombarded again in 1821 and in 1827. The broken statuary, which lay about the stately ruins of this architectural masterpiece, was removed in the latter part of the 18th century with the consent of the Turkish Government and later sold to the British Museum. Lord Elgin, who brought these sculptures to England, has been criticized by Byron and others for his act, but it should be remembered that not only the Turks, but also the Greeks themselves, were using the ruins of the Parthenon as a marble quarry at that time. A number of the figures of the pediment groups have been preserved, but it would be impossible to tell how they were arranged on the temple if it were not for the descriptions which we find in classical literature, and the rather unsatisfactory sketches made by a French artist, Jacques Carrey, who accompanied the ambassador of Louis XIV to Constantinople in 1674, seventeen years before the building was bombarded by the Venetians.

The pediment of the east façade, over the entrance to the part of the temple dedicated to Minerva, represents the contest of the goddess with Neptune for the right to become the patron deity of Athens. Both strike the ground of the Acropolis with their weapons, and both have come in their chariots. That of Minerva is driven by Victory, and Neptune's charioteer is Iris. Just as the pediments of the Temple of Olympia represent an event, which was supposed to

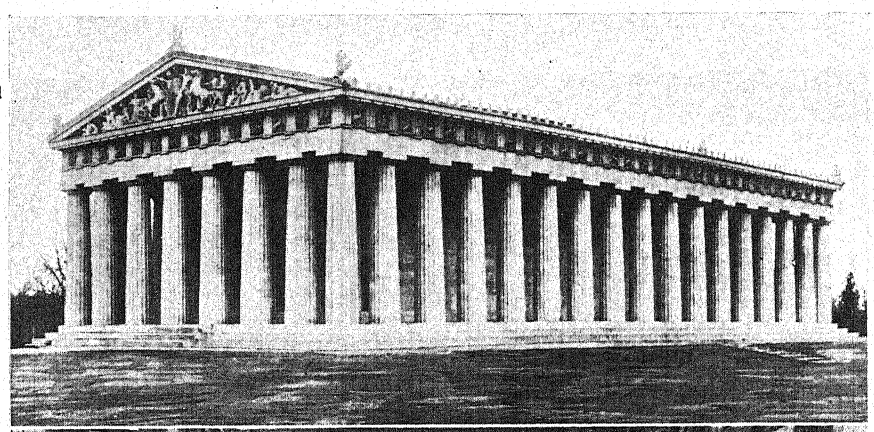
Fig. 423. — Statue of Hebe from the east pediment of the Parthenon.

have occurred at that place, so the Acropolis is considered to have been the scene of the mighty struggle portrayed on the Parthenon. To carry out this idea, the first inhabitants of the city, Cecrops and Erechtheus with their wives and children, are also represented on the scene.

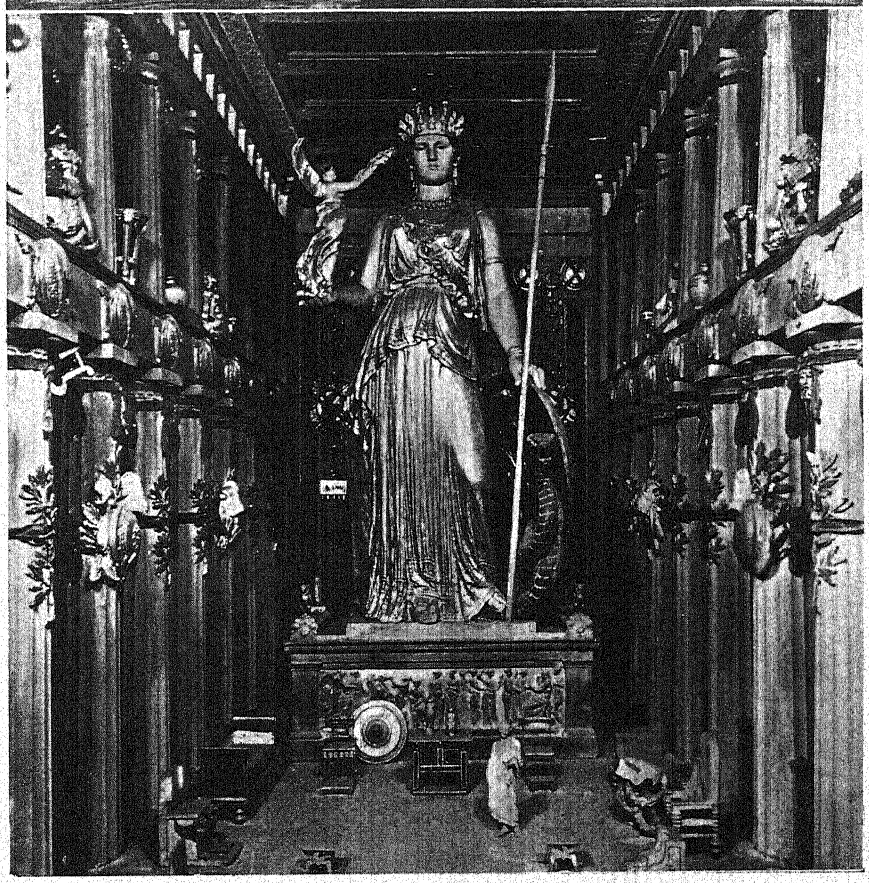
Of the west pediment, Pausanias only notes that the sculptures represent the miraculous birth of Minerva from the head of Jupiter. The same scene is rudely carved on a Greek well-curb, now in the Museum of Madrid. From this we are able to make out the probable position of the principal characters, which have now disappeared from the Parthenon. The figures from the angles are the only ones which have been preserved; these are the Horae and the Parcae, the goddesses who presided over birth and death. The symbols of the sun and the moon, with the heads of their chariot horses, appear in the acute angles of the pediment, and these express the same idea of birth and death. The rearing horses of Helios neigh their announcement of the morn; those of Selene, the moon, droop their heads wearily (fig. 424). Minerva was born at daybreak, and the sculptors of the Parthenon portray her birth as a poetic symbol of the dawn. As we contemplate the fragments of these statues in the British Museum, we forget the existence of poetry and painting; sculpture alone seems sufficient to express every feeling of mankind.

The nude bodies are happily simplified, but not to such an extent as to cause them to lose their human character. On the contrary, they seem to live

1



2



1. A reproduction in the exact size and of the same materials of the Parthenon of Athens at Nasville, Tenn. U. S. A.—2. A restoration of the interior of the Parthenon of Athens with the Minerva of Phidias at the Metropolitan Museum in New York.

and breathe. The body of the great figure of Neptune, which has recently been made complete by the discovery of a new fragment in Athens, is the prototype of the godlike idealization of mankind (figure 453). The figures from the angles of the pediments have the same dignity. The only one of these statues, of which the head is preserved, is that of Theseus, or Ilissus, as it is called. This is the reclining figure of a young man from the east pediment. (Plate XXXVI.) The female figures are all robed, but the personality of each is subtly rendered, even in the treatment of their tunics. The Parcae, the funereal deities of Hades, are draped in such a manner that the delicate folds of the transparent fabric closely follow the figure. The garments of Iris and Victory, on the other hand, stream and flutter in the wind (fig. 425). Those of the Olympian goddesses and of Hebe, the cup-bearer of the immortals, also fall in broad folds and curves and seem to be caressed by the sun and the gentle breezes of heaven (fig. 423). Every one of these marble figures seems in harmony with the entire universe. Only one of the female figures still had a head, and even this was wrenched from the body before the statue was brought to London. We do not know to which figure it belonged, but it is greatly esteemed, for it reveals

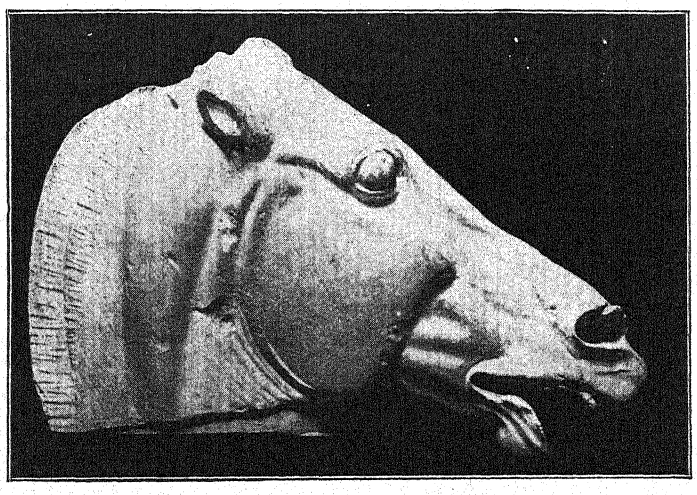


Fig. 424. — Head of one of the horses of Selene. PARTHENON.

Fig. 425. — Statue of Iris from the east pediment of the Parthenon.

Fig. 426. — Female head from one of the pediments of the Parthenon. *(Laborde Collection.)* PARIS.

Phidias' treatment of the female face, when he wished it to be cold, splendid and free from human personality (fig. 426). It is interesting to compare this monumental head with the smaller ones of the figures of gods and goddesses on the frieze of the portico (fig. 429). We see the same idealization in the heads of the horses; indeed we might find fault with the too great transformation, we might almost say humanization, of their expression. But after all it is the idealization of the type, the archetype of the horse, the loftiest rendering of the idea itself, which Plato demanded as the goal to be attained by the artist.

The statues of the pediments may have been set in their places after the exile of Phidias, but there can be no doubt that their superb arrangement was the plan of the master, conceived at the very beginning of the work, for the building itself was reinforced from within by iron bars at the spots on which the figures were to be sed. However, we may well believe that he saw the metopes set in place on all four sides of the building. These were ninety-two in number and were carved in high relief. They represented the exploits of the Athenians under the leadership of Minerva and consisted of such scenes as battles with Centaurs, Amazons and the Greek barbarians of Asia in the Trojan War. The underlying idea was always the eternal struggle

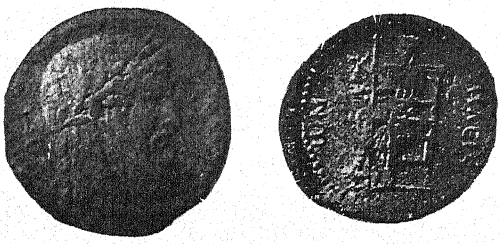
Fig. 427. — Panathenaic frieze. PARTHENON.

of man against the untamed forces of nature.

In contrast to these heroic compositions, in the great colonnade was the famous frieze portraying a procession of all the citizens of Athens, represented by their different categories and repairing to the shrine of Minerva. This was a civic ceremony at which all the people of Athens annually assembled to bear a new mantle, or peplum, to the goddess. It was originally thought necessary to robe the old wooden image of Minerva Polias in a woolen peplum; later the ceremony consisted only of giving the peplum to the priest at the entrance of the Parthenon, and it was hung for the ensuing year in the *cella* containing the gold and ivory statue made by Phidias. This frieze, which extended around the entire building, was five hundred and twenty-two feet long and five feet three inches high. It was carved in low relief with figures half the natural size, so there was room for the entire delegation of citizens, which was no small one. It was something new at that time, not only because it introduced scenes from civil life into the decoration of a temple, but also because of the naturalness with which the groups of citizens were rendered. Old men dressed in mantles, long lines of girls and matrons, men with jars and vases

Fig. 428. — Panathenaic frieze. PARTHENON

Fig. 429. — Group of goddesses. Parthenon frieze. *(Museum of Athens.)*



Figs. 430 & 431. — Coins from Olympia representing the Jupiter of Phidias.

for the temple (fig. 427) and the livelier troop of youths on horseback (fig. 428), all are moving toward the east façade of the temple, where the entrance is and where they are to give their offerings to the priest.

The variety of this composition is admirable. Each figure has a pose or attitude all its own, but is never out of harmony with the whole. The youths on horseback are all buoyant, but each in a different manner; the maidens advance with a measured rythmic step, but there is an entire absence of monotony. Often an apparently unimportant detail, such as a horseman alighting to adjust his horse's bridle, or a girl rearranging her veil, compels our interest, but does not disturb the orderly advance of the entire cortege.

By a most happy conception, the procession is interrupted at that part of the frieze directly above the east entrance. Here the spectator is transported to Olympus, where we see the twelve great gods and goddesses presiding over the ceremony from on high. These are perhaps the worst mutilated of any the figures which were taken to London. Fortunately, excavations on the Acropolis have revealed a fragment which had fallen before the rest and had been buried by other debris. On this we find the heads of Neptune, Apollo and Diana in a perfect state of preservation (fig. 429). These were either the work of Phidias himself, or were at least directly inspired by him. Not only are they very beautiful, but they are a valuable example of the treatment of the gods of Olympus on relief sculptures.

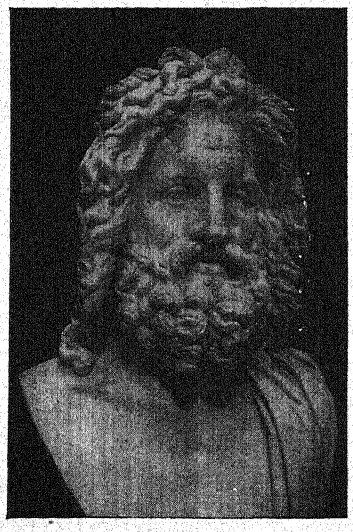
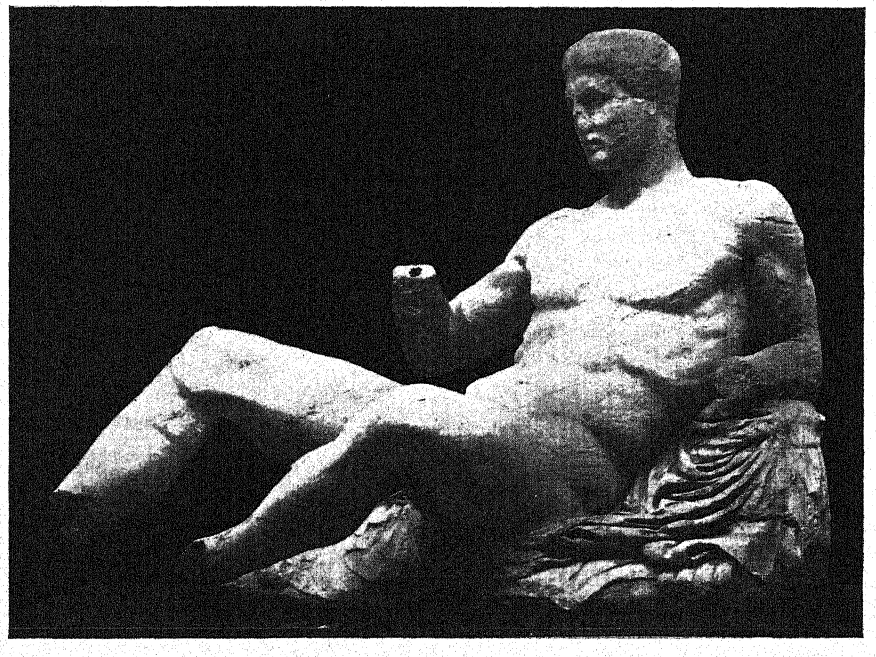
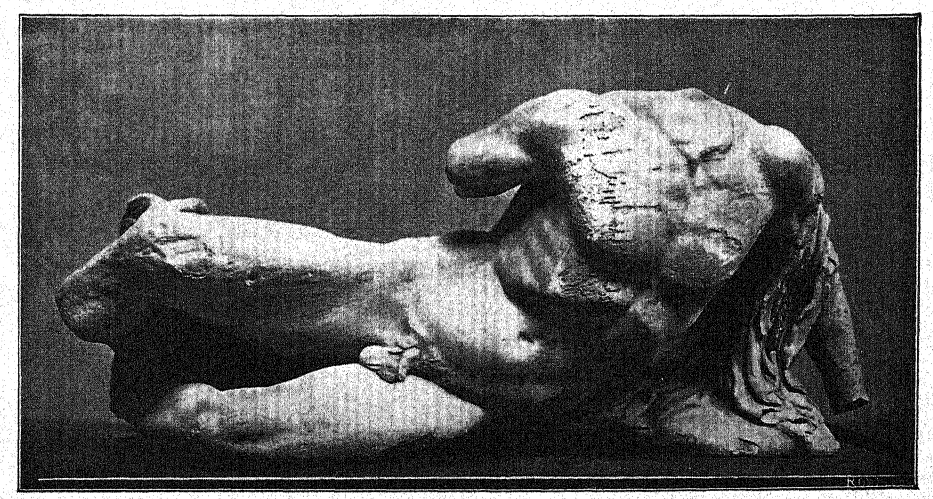


Fig. 432. — The Jupiter of Otricoli. *(Museum of the Vatican.)*

In this great composition of sculptural decoration, the general arrangement of which reveals the great style of the master, we see the work of artists of very unequal merit, proving conclusively that the conception of the whole was that of Phidias. He doubtless made his own sketches and working drawings of the entire decorative scheme and trained his corps of artists until they gained a comprehension of his idea. The fact that the work was done by many hands explains the inferior execution of some of the metopes and of certain portions of the frieze. This is particularly true of the group of horsemen, where the same model has been copied a number of times. The heads and other details of some are carved by artists of great ability, while



Torso of Theseus. East pediment. PARTHENON. *(British Museum.)*



Torso from the angle of the west pediment. PARTHENON. *(British Museum.)*

others are chiseled by artisans of mediocre capacity, who could do little more than follow the general outlines of the figures.

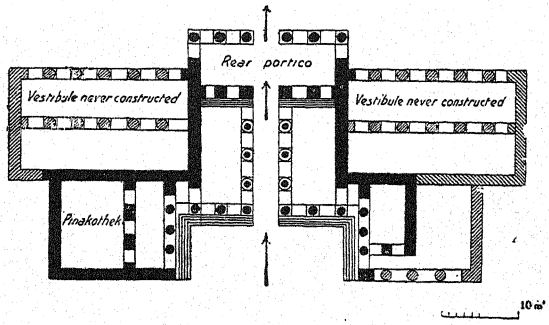


Fig. 433. — Plan of the Propylaea of the Acropolis of Athens.

Probably the last great statue carved by Phidias, and the work of his old age, was the famous one of Jupiter in the temple of Olympia. This, like the Parthenos, was of gold and ivory. We are not nearly so well informed about this statue as we are of the Parthenos, for no copies have been preserved, which give us a good idea of the original. It is easy to see that this majestic figure of Jupiter, of colossal size and seated upon a marvelously rich throne, would seem little better than a caricature in the small replicas manufactured for the pilgrims who came to this temple. The eulogies of the ancient writers give us some idea of the awe inspired by this colossal figure in the semiobscurity of the *cella*. Even the early Church Fathers speak of it with an admiration which attests the power of the pagan tradition. Some Olympian coins are all that give us a general idea of the type of the figure, and certain heads of Jupiter dating from the Roman period impart something of the majesty of Phidias' statue. There is a bust in tbe Museum of Boston, which gives some conception of its godlike calm; another later bust in the Vatican has a frowning brow and does not indicate the same composure, but the hair resembling a lion's mane and the mighty beard show it to be intended for the Phidian Jupiter (fig. 432).

Much light has been recently shed on the origins of Phidias' splendid style, and we now know that he took much from the paintings of Polygnotus. We already have seen how the youthful Phidias was attracted by the great painter and how he was once on the point of devoting his life to pictorial art. He met

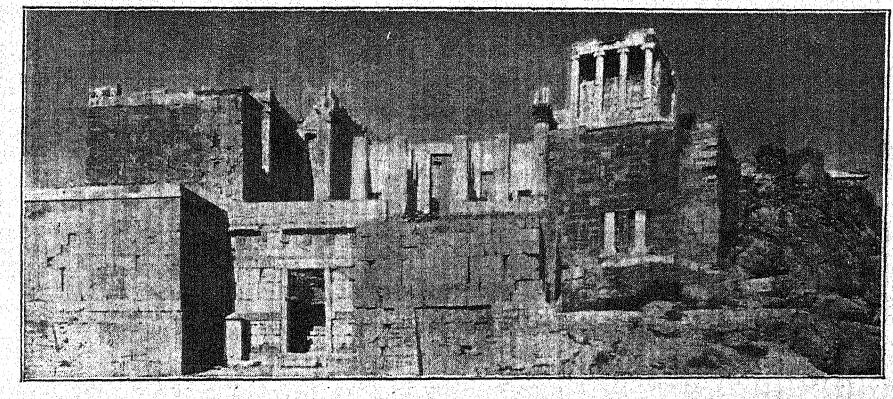


Fig. 434. — The Propylaea, Beulé Gate and Temple of Minerva Nike.

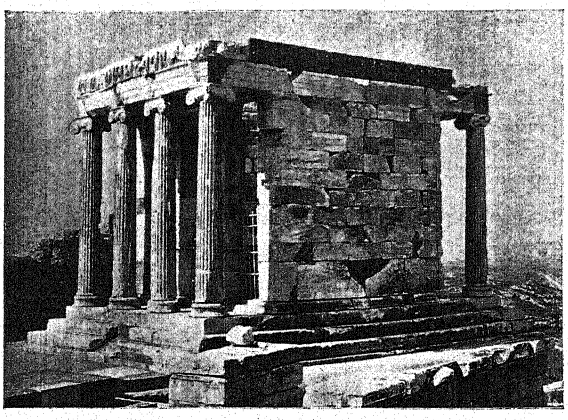


Fig. 435.— Temple of Minerva Nike. *(Acropolis of Athens.)*

Polygnotus again after he had become a famous sculptor. None of the frescoes by Polygnotus have been preserved, but we know something of his art from the compositions depicting the Heroic Age, with which the ceramic artists decorated their vases. On one of the metopes of the Parthenon, which belongs to the school of Phidias, we see Helen pursued by Menelaus and protected by Venus after the fall of Troy. This scene is also pictured on a painted vase, and both were derived from a fresco by Polygnotus. One of the gods of the Panathenaic frieze, the restless Mars, sits with his hands about his knee, a somewhat unsuitable posture for this frieze, for all the figures are represented as standing, advancing, or in an ordinary sitting position. This complicated pose of Mars on the Parthenon frieze goes back to an older painted type, which appears upon the earlier vases and was also taken from the frescoes of Polygnotus. Phidias' originality consists in his having combined the teachings of the various schools rather than in any actual innovations. Polygnotus was a real originator of types, as were Scopas and Praxiteles after him, but he did not perfect the inventions of the Doric and Ionic schools and make of them a homogeneous whole, as did Phidias.

As the art of Polygnotus becomes better known, Phidias may lose his reputation as an innovator and originator of types, but he will be no less a creator, for, as Plato says, "He creates like a man inspired." Artistic creation is not merely the invention of a certain subject or type, but lies in the actual execution which, if it is truly artistic, is always new.

The sculptures of the Parthenon are, in many respects, the highest artistic achievement of mankind. In ancient times they aroused the same enthusiasm that we feel today. Pericles well knew their perfection when he defended his projects, and when he reproached the Athenians for their lack of admiration for these works, which he called an "astounding miracle". Plutarch remarks with sublime simplicity: "What is most remarkable about these works, is that they were completed in so short a time for so long a life. When they were carved, they already had a beauty that made them seem old, and yet they always kept the freshness of youth. When they came from the hands of the artists, they possessed a delicacy of grace, such that time can have no effect upon them. It is as if they were endowed with a spirit of ever recurring youth, and a soul that can never grow old." Soul, spirit, age and youth! These are the words with which the ancients described those marbles, now mutilated by time and the

hand of man, and confined in the grey hall of the British Museum, which shelters them today.

Pericles erected other buildings besides the Parthenon, some in the city itself, and some on the Acropolis. The most important of these was the Propylaea, or monumental entrance, which forms a sort of façade of the entire sanctuary. It is on the west side and is the only easy approach to the rocky hill of the Acropolis. All the religious architectural groups in Greece were embellished with gateways of this sort, some larger and some smaller. This was a traditional feature dating from pre-Hellenic times. At times these consisted of a passage way between columns, as in the fortress of Tiryns. Pericles entrusted this work to the architect, Mnesicles, whose plan was entirely too ambitious and was only partly carried out. Excavations have laid bare the foundations intended for certain rear porticoes, which were to be added, and which would have given that part of the structure a much richer appearance (fig. 433).

Figure 415, which is a judicious restoration of the entire Acropolis, shows the great decorative value of this monumental gateway with its pediment over the central part and its two wings projecting on either side. In the Roman period, a great stairway was constructed, which led to it, and a lower entrance, called the Beulé Gate, which was discovered in 1840 by a Frenchman named Beulé (fig. 434).

As it was actually built, the structure was not entirely symmetrical. Besides the entrance way between the columns, there were two small wings of unequal size. One was completed and called the Pinakothek, but the other, which was on the right hand side, was only begun.

Fig. 436. — Victory from the balustrade of the Temple of Minerva Nike.

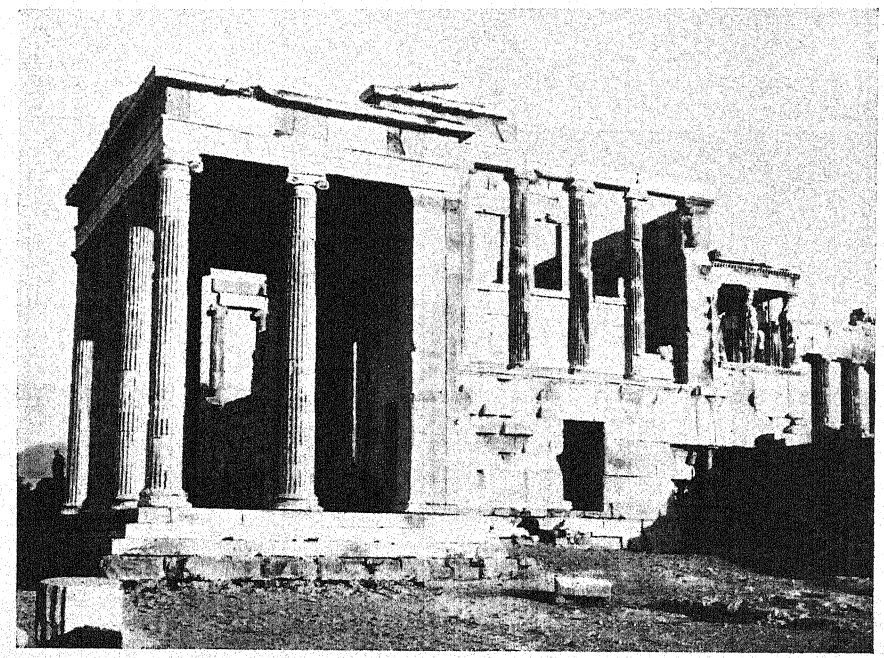


Fig. 437. — General view of the Erechtheum as last restored.

The columns of the façades are Doric and have no sculptural decoration, so the entrance to the Acropolis still possesses that austere magnificence which is characteristic of the Doric order. However, it is interesting to note that the columns on either side of the interior passage-way were Ionic, making this the first example of a combination of the two styles in the same structure.

A small Ionian temple was set upon a bastion on one side of the Propylaea, which projected in order to defend the entrance. This was dedicated to the victorious Minerva, or Minerva Nike (figs. 434 and 435). The frieze of this aedicula is ornamented with scenes from the battle between the Greeks and Persians at Plataea, showing that the Athenian sculptors now preferred historical events to mythical exploits as the subjects of their compositions. The parapet of the bastion on which this temple stands, was decorated with imposing reliefs of victory figures, done in the remarkable style inaugurated by Phidias. Especial attention was given to the treatment of the folds of the drapery, and the same success was achieved as with the similar sculptures of the Parthenon. One Victory steps forward to mount her chariot, and another raises her foot in order to tie her sandal. The latter is particularly graceful. Although the head has been destroyed, the beautiful figure bends forward and her delicate body is revealed beneath the fine fabric of her mantle (fig. 436).

Still later, after the death of Pericles and Phidias, it was considered necessary to erect another building, which would complete the entire composition (fig. 437), and also furnish a temple for those ancient cults which the construc-

tion of the Parthenon left without a shrine. On the sacred site of the *Old Temple*, the marks made by Neptune's trident and Minerva's spear were still to be seen. It was necessary to make amends to Cecrops and Erechtheus, scorned by those rationalistic critics, Pericles and Phidias, and house in a fitting manner the sacred ancient image of Minerva Polias, now displaced by the new Parthenos. So a temple, named the Erechtheum, was built near the site of the *Old Temple* and dedicated to the service of the neglected deities. It was constructed in the pure Ionic style native to Athens, but the reason for its arrangement remained an enigma to investigators until the pick of the archaeologist uncovered the plan of the Old Temple. The superimposed plans in figure 414 show how the Erechtheum offered practically the same general arrangement and facilities for worship as did the *Old Temple*. It is a sort of triple temple; in one half is the *cella*, which contained the Minerva Polias; in the other are the two chambers dedicated to Cecrops and Erechtheus. On one side of this temple is a charming porch dedicated to Pandrosea, the daughter of Cecrops, and called the Pandroseum. This was rather an innovation, as the roof was supported by six girls' figures called caryatids. Elsewhere in Greece, however, the use of a human figure to take the place of a column was nothing new. We have only to recall the male caryatids of the temple of Jupiter in Agrigentum and those of the treasuries of Delphi, to see that the builders of the Erechtheum followed the same idea. These figures constitute one of the most delightful and graceful features of the Acropolis. They convey an impression of solidity, and yet they are not at all rigid. They do not bend under the weight, nor yet do they seem unconscious of it. Each figure rests its weight on one foot, and the arms are close to the body, giving mass to the supporting column, which it really is (fig. 438).

The lightness of the Erechtheum is a strong contrast to the massive Doric Parthenon. The sacred way of the Acropolis led through the Propylaea, past the great bronze Minerva Promachus, and in front of the Erechtheum. The Parthenon, a little further on, did not cause the lesser structure to appear insignificant. It was then necessary to pass along the entire length of the Parthenon to arrive at the entrance, which was on the further side, facing the east.

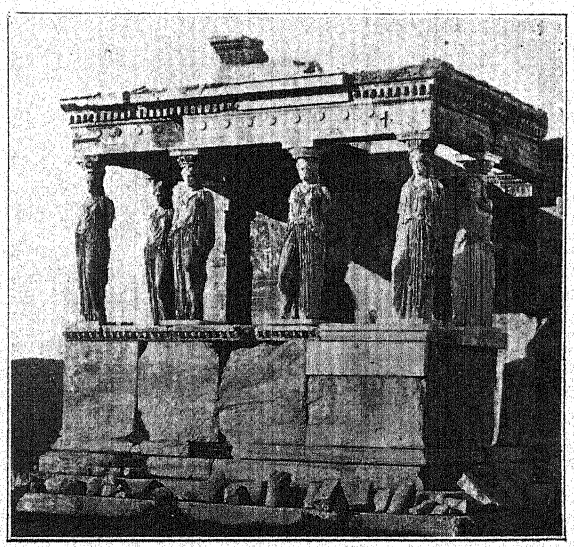


Fig. 438.—Porch of the caryatids of the Erechtheum.

It was not only by their size that these buildings formed a con-

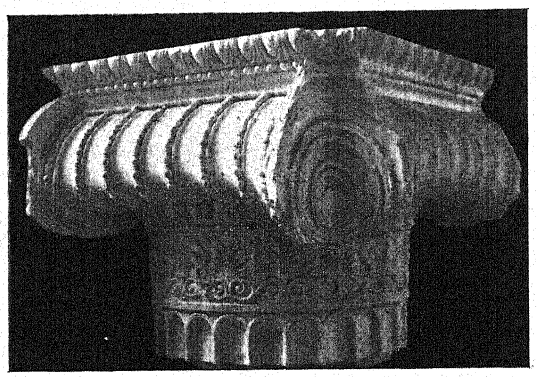


Fig. 439. — Capital of one of the angles of the Erechtheum, viewed from behind.

trast to one another, but also by their style. That of the Parthenon is simple and severe, and its mouldings are plain and almost always rectangular; the Erechtheum abounds in delicate ornamentation, and its light mouldings, one above another, constitute one of the most graceful details found in Greek architecture. The door displays a richness and beauty of design, which, in spite of its opulence, does not appear to be overcharged with ornamentation (fig. 440). The egg-and-tongue and honeysuckle patterns are exquisitely carved, and the delicacy of the capitals is almost beyond description (fig. 439).

The Erechtheum, like all Greek temples, was polychrome. An inscription, which preserves a sort of cost-sheet of the building, tells us of the large sums spent for coloring materials, especially the gold used to cause the fillets and beading of the mouldings to stand out from their fine marble background.

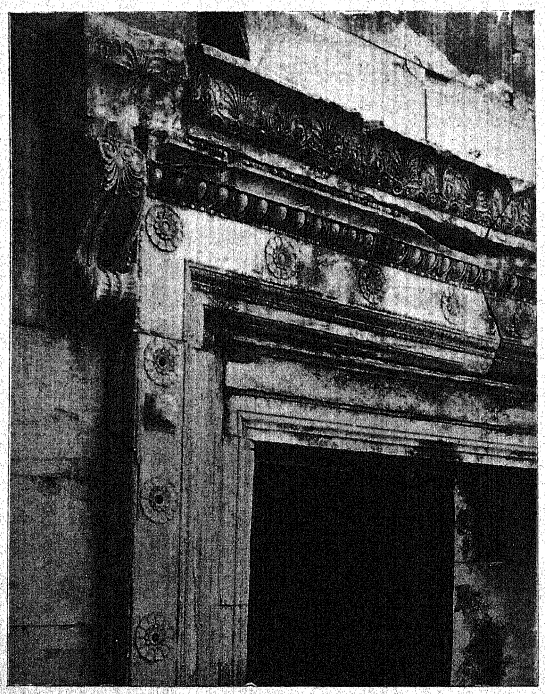
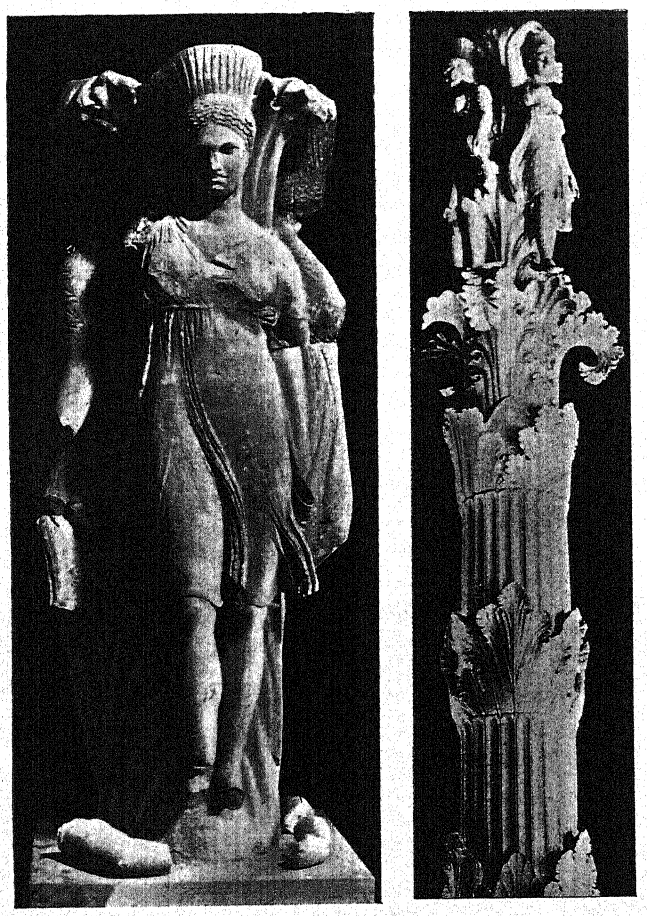


Fig. 440. — Entrance to the Erechtheum.

There were other buildings in Athens which were built during the time of Pericles, among them the so called Temple of Theseus, which was dedicated rather to Hephaestus, or Vulcan. This was at the foot of the Acropolis and was a Doric building, possibly the work of Ictinus also. Here too was the Odeum, which Pericles had built to provide for musical entertainments. One of his teachers, in his youth, was the musician Damon, a man who used his profession to cloak his political activities, and who was a philospher and a radical. Pericles, with his avowed purpose of making Athens the ideal city, could not afford to neglect the art of music, which Plato, in his

Republic, calls the most important branch of education. The Odeum was an enclosed structure of circular form, filled with seats and ranges of pillars. "From the outside", says Plutarch, "its roof was made to slope and descend from a single point at the top, in imitation of the King of Persia's pavilion, and was the gift of Pericles himself."



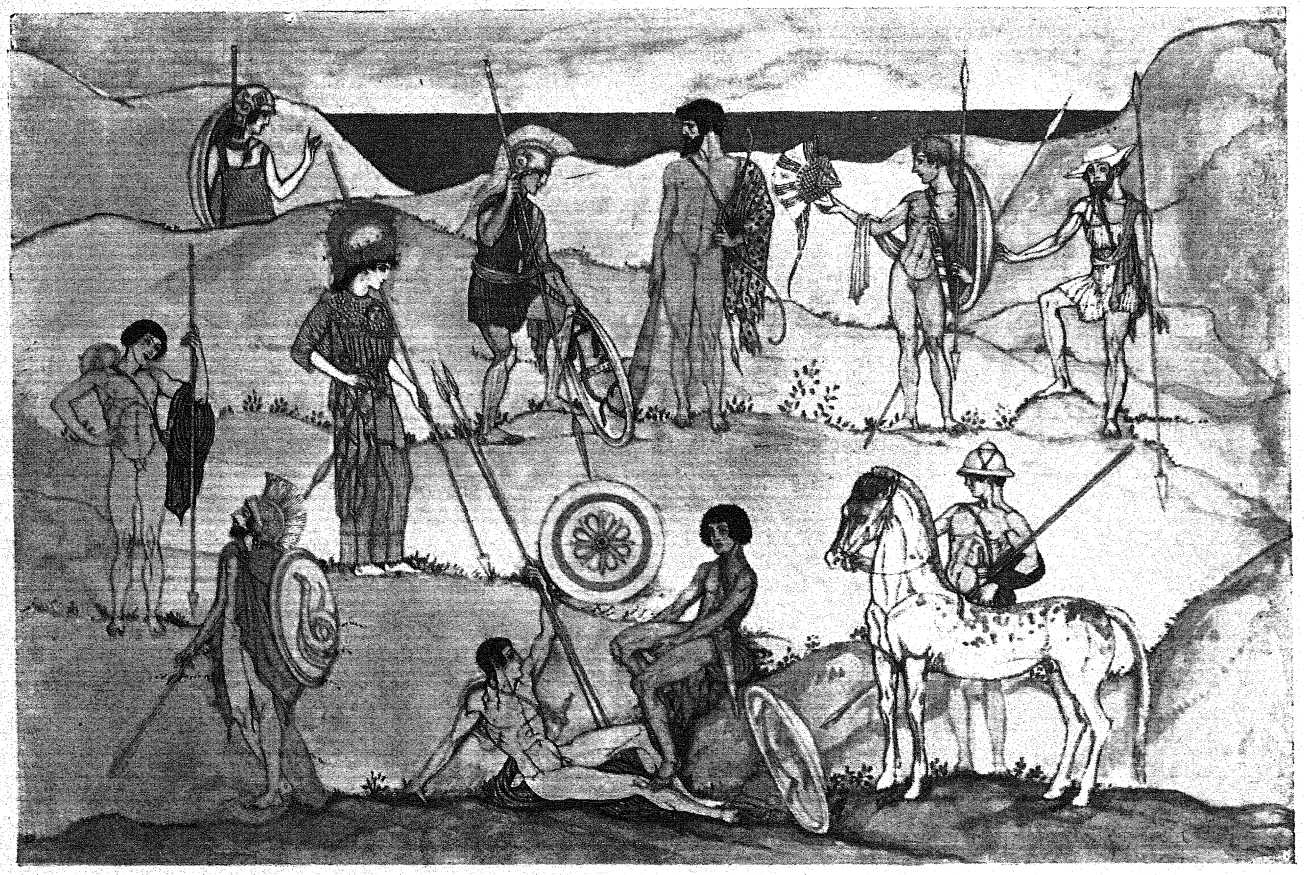
Figs. 441 & 442. — Votive column. DELPHI.

This ambitious policy of reconstruction on a magnificent scale was not confined to the city, but extended over the whole of Attica. The Temple of Eleusis extra-muros was an especial object of Pericles' attention, which he rebuilt with great splendour. This sacred spot and the mysteries practiced here did not arouse the distrust of the other Greek peoples, and Eleusis might well become a religious centre common to all. The building, dedicated to the Eleusinian mysteries, was rectangular and had a number of rows of columns. It probably had a cupola roof surmounted by a lantern and was the work of the architect Corebus. Excavations made on its site have laid bare only very scanty remains, but the foundation walls and the places where the columns stood can still be traced. Another of Pericles' projects was the reconstruction of the port of the Piraeus, which was to be connected with the city by a double wall. As it was necessary to rebuild this suburb entirely, Pericles put into practice the theories of Hippodamus of Miletus, an Asiatic Greek philosopher and writer of treatises, who had advanced certain new ideas about the planning of the ideal city and the distribution of its suburbs. In the Piraeus, therefore, as in the Athenian colony of Turi near Tarentum, the streets were laid out according to the Hippodamian system. Large squares were formed by the main avenues, and these in turn were cut

Fig. 443. — One of the caryatids of the Erechtheum.

up into blocks by narrower streets and lanes.

It was about this time that the Corinthian capital originated, which was to become the characteristic feature of a new type of architecture. It was bell shaped and surrounded by a triple row of accanthus leaves. At its corners were volutes, smaller than those of the Ionic order, but not unlike them. The buildings on which these capitals were used were largely Ionic in other respects. Ictinus, the architect of the Parthenon, made use of this capital, although very sparingly, in a temple which he built in Phigalia. Here he set a single Corinthian capital upon an ornamental column in the court. The capitals of the other columns were Ionic. Ancient writers ascribe the invention of this capital to a sculptor named Callimachus, the first, they say, to combine the volute with the acanthus pattern. The story is that when he was in Corinth, he saw a basket containing votive offerings, which a slave girl had placed upon the funeral stela of her dead mistress, and which she had covered with a tile. A wild acanthus had grown up about the basket and tile, giving the sculptor the idea for the new design which has since become so famous. There may well be some truth in this charming tale, for Callimachus lived in Athens about the end of the 5th century B.C., where he was a sculptor of high repute. He might be called the Benvenuto Cellini of his time, for he was noted for his exquisite taste in decorative art. He was the designer of the great lamp, ornamented with acanthus leaves, which embellished the Erechtheum. It is not improbable that the idea of crowning a column with plant forms originated with the Athenian school of the time of Pericles, but that to Callimachus is due the happy invention of the Corinthian capital. From that time on the acanthus leaf pattern pervades every branch of Greek art. The votive column at Delphi is the most tasteful example of the acanthus leaf decoration and is a masterpiece of sculptural ornamentation. It supports a group of three Ionian dancers, crowned with plumes, who hold up their light tunics with one hand, while the other is raised aloft in a graceful gesture (fig. 441). Although the acanthus decoration and its style are the only reasons we have for ascribing this work to Callimachus. Pliny confirms this opinion by his statement that Callimachus carved a



Exploit of Hercules. Restoration of a fresco by Mikon, a pupil of Polygnotus.

group of dancing maidens for the state of Sparta. At all events, this beautiful column at Delphi gives us some conception of what the monumental golden lamp of the Erechtheum must have been (fig. 442).

In addition to their decorative work, the sculptors of Greece continued to present the traditional *korè*, or robed maiden, and the athletic youth, or Apollo. We see the evolution of these types in the serene but splendid style of the school of Phidias. The most beautiful examples of sculptures of the *korai*, are the caryatids of the Erechtheum. These, however, are only a rendering in the full round of the athletic Attic maidens of the Panathenaic frieze, and like the latter are clad in mantles which hang in folds over the girdle (fig. 443). The male type exhibits less change in its general appearance than do the female figures. The athletic youth holds out his arms with a frank gesture, both feet rest firmly upon the ground, and the accentuated lines of the breast and hips recall the anatomical interpretations of the preceding centuries. The handsome youthful face of one of the best Apollos of this type has an almost effeminate expression (fig. 444).

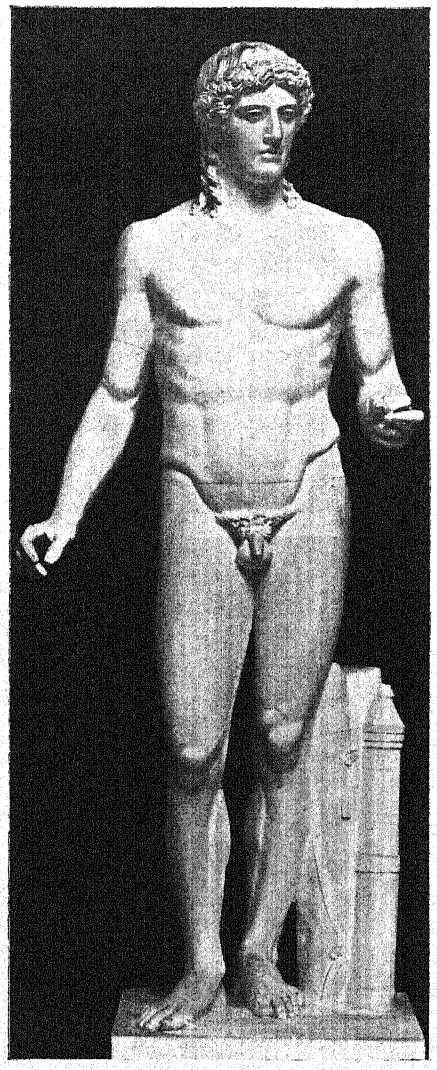


Fig. 444. — The Apollo of Cassel.

Besides these traditional figures, the sculptors of the latter part of the 5th century undertook to present other subjects of a mythical character. We can readily understand that the tragic story of Niobe, the unhappy mother who saw her children slain by the arrows of the angry gods, would offer an especially attractive theme to the sculptor. There are a number of statues of Niobids, crouching to avoid the terrible punishment of the gods. One of these, discovered in Subiaco a few years ago, represents a young man on his knees, raising supplicating arms (fig. 445). Another is the famous statue, found in Rome during the excavations for the foundations of the Banca Comercial. This is a seminude young woman who attempts to draw out the arrow which pierces her shoulder (fig. 446). Her torso is of unusual beauty, and the figure is the more charming because of the pity we feel at the

thought of the arrow piercing the beautiful wounded body. These statues must have formed part of compositions in which all the children of Niobe also figured. It may be that they are sculptural reproductions of scenes portrayed in the pictures of Polygnotus and his school.

We understand something of the splendid style of Polygnotus and his pupils from Pausanias' descriptions of his frescoes at Delphi and Athens. On the three walls of a stoa, or portico, in Athens he painted the three favorite heroic scenes of that period. These were battles with Centaurs, with Amazons, and with the Persians. Such mural paintings were often the work of his whole school, for Polygnotus worked at the side of his pupils, as did Phidias. We know something of the battle with the Amazons from the figures copied on the vases of the time, and from the colored decoration of an Etruscan sarcophagus in Florence (fig. 447). There were some other frescoes by Polygnotus in Platea, picturing scenes from the Trojan War, which were rudely copied on a monumental tomb in Lydia in bands of sculptural relief (figs. 448 & 449). These reliefs from the tomb of Giloi-Bassi are probably unskilful reproductions of the paintings of Polygnotus, for we see the same figures on the most characteristic Athenian vases of his time. These semi-Asiatic sculptors of Giloi-Bassi, like the Etruscan painters of the Florence sarcophagus, must have had

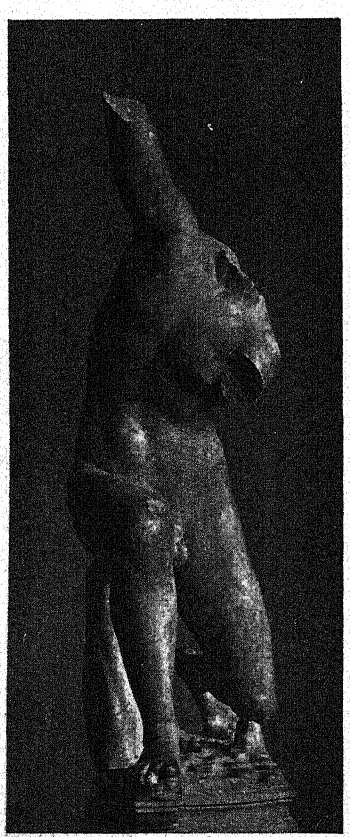


Fig. 445. — The Niobid of Subiaco. *(Museum of the Thermae.)* ROME.

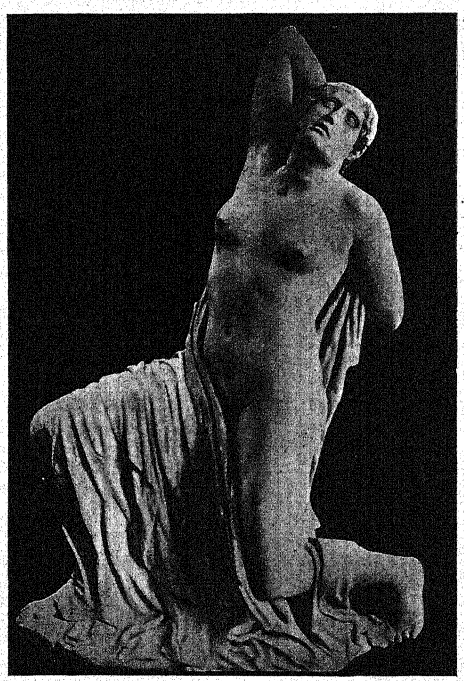
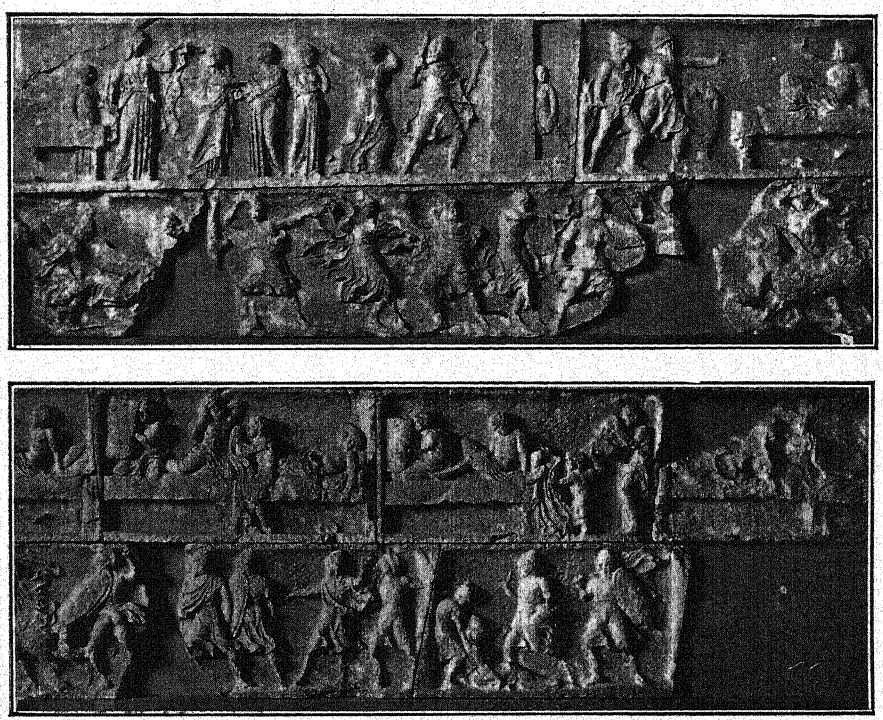


Fig. 446. — Niobid discovered in Rome, now ornamenting the Banca Comercial. MILAN.

Fig. 447. — Combat between Athenians and Amazons. Copy of a Greek fresco, painted on an Etruscan sarcophagus. *(Archaeological Museum of Florence.)*

sketches and copies of many of the great frescoes of Polygnotus, and we are so far able to infer their character that a restoration of these compositions has been considered feasible.

To judge of their style, however, we must turn to the descriptions and critiques of the philosophers, among them Aristotle, who commented on the paintings of Polygnotus. The figures were all in the same plane, those in the background being of the same size as those in the foreground. Distance was suggested by making the curves, which indicated the unevenness of the ground,



Figs. 448 and 449. — Return of Ulysses. Relief from Giloi-Bassi. *(Museum of Vienna.)*

Fig. 450. — Greek vases discovered in Emporion. SPAIN. *(Museum of Barcelona.)*

cover the lower half of the figures supposed to be farthest away. A few trees were the only indication of a landscape, and both perspective and distribution of light and shade were entirely lacking. Only elementary colors were used, and the figures were sharply outlined in profile. The value of these great compositions lies in the beauty, novelty and action of all the figures. Their arrangement and execution, especially those of the marvelous groups of heroes, have been admired by the painters and critics of every century. A copy of a fresco by Mikon, one of the pupils of Polygnotus, has recently been identified. This painting is on a vase from Orvieto and represents a scene from the life of Hercules. The son of Jupiter appears, surrounded by the heroes who accompanied him to Hades to deliver Theseus. (Plate XXXVII.)

The supremacy of Athens in the minor arts, during the Age of Pericles, is beyond question. The dictator alludes to this industrial progress in one of his

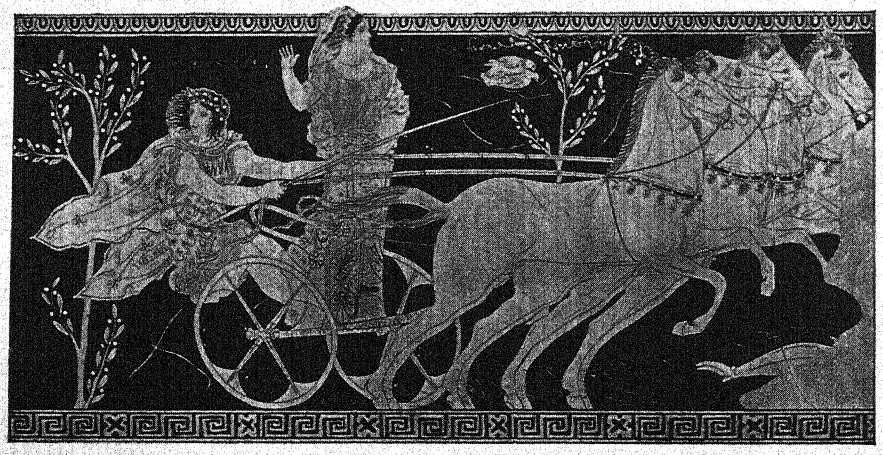


Fig. 451. — Pelops and Hippodamia. Athenian vase of the 5th century B.C.

Attic vase of the last third of the 5th century B.C. *(Museum of Athens.)*

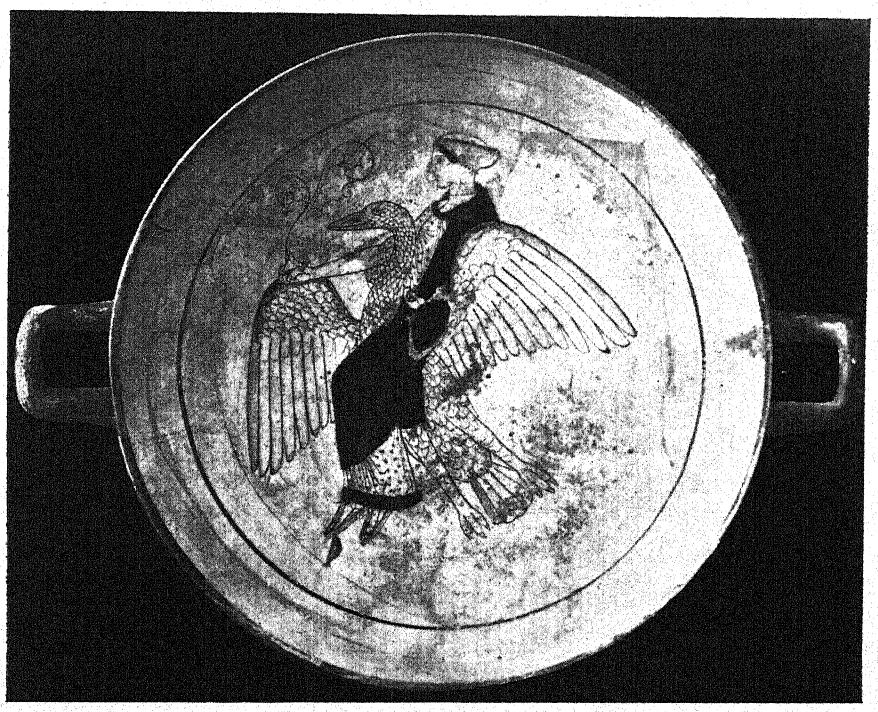


Fig. 452. — Cup representing Venus and the Swan.

speeches when he tells how his great projects have developed artists capable of working in ivory, gold and ebony, and carpenters, masons and embroiderers. The best artists of Pericles' time did not scorn to aid the progress of the industrial arts. The highly perfected style and technique of the ceramic art of this period is largely due to Polygnotus' own personal efforts. Vases were ornamented with remarkable scenes and large figures, which were made to stand out from the dark background. The figures were white, and the details were sketched in simple lines with the finest of brushes (fig. 450). A marvelous effect was produced by the use of two colors only, a black and a terracotta red. Some of the vases were large and exquisitely shaped. (Plate XXXVIII.)

Many of the subjects were taken from the great monumental paintings (fig. 451). Other consist of simple scenes from daily life. Many are signed, and some painters added to their signatures, eulogies of their own work, through which we learn of the rivalries existing between the artists of the different potteries of Athens at the end of the 5th century B.C. Often a vase was dedicated to a handsome youth, or *kalos,* who was one of the arbiters of the time, in matters of taste. Information of this sort often serves also to fix the date of the vase, for many of these youths, when they grew older, became public men, whose activities were recorded by the historians. But the red and black colors were not varied enough to satisfy the lovers of fine pottery, who were familiar with the vivid colors of the frescoes of Polygnotus. The result of

this dissatisfaction was the production of a new colored type of Athenian pottery. The entire vase was given a coat of white enamel on which figures were painted in the simple but bright colors used by Polygnotus, such as deep blue, carmine and ochre (fig. 452). The beautiful pottery painted in this manner was not intended for domestic use, but served rather for gifts and votive offerings, such as the Greeks placed upon their tombs.

Summary.—Through the initiative of Pericles in the middle of the 5th century B.C, the reconstruction of the temples on the Acropolis of Athens, which had been destroyed by the Persians, was recommenced on a most ambitious scale. The principal undertaking was the building of a new temple of Minerva, to take the place of the *Old Temple* of the Acropolis. This was the Parthenon. Its pediments and metopes, and the frieze of the colonnade were ornamented with the sculptures of Phidias and his school. Phidias was a pupil of Ageladas and had already carved two statues of Minerva, the Lemnian and the Promachus. His third Minerva was made of ivory and gold and was called the Parthenos. He was later prosecuted for the theft of some ivory and went to Olympia, where he was commissioned to carve a seated figure of Jupiter. The school of Phidias continued to be characterized by the noble and splendid style of its founder. The traditional types of the athletic youth and the robed maiden took on a new beauty, and new themes, consisting of mythological subjects, such as the representation of Niobe, are treated with the same ability. After the deaths of Pericles and Phidias, the following buildings were erected upon the Acropolis: the monumental gateway called the Propylaea, the Temple of Minerva Nike, and finally the Erechtheum, which was purely Ionic. Inside the Erechtheum, there was a bronze lamp of enormous size, decorated with acanthus leaves. This was the work of Callimachus, said to be the inventor of the Corinthian capital, which was also ornamented with acanthus leaves.

The great painter, Polygnotus, was the contemporary of Phidias, coming a little before him. He was the originator of great monumental paintings or frescoes, the style of which was splendid and magnificent. His influence is also to be traced in the ceramic art. In the last part of the 5th century B.C. the pottery of Athens attained its highest perfection. Vases were not only decorated with white figures on a dark background, but the white lecythus was also made, painted with the elementary colors used by the school of Polygnotus.

Bibliography. — A. MICHAELIS: *Der Parthenon,* 1871. *Ancient Marbles in Great Britain,* 1882. — B. SAUER: *Der Weber Labordische Kopf,* 1903. — E. A. GARDNER: *Six Greek Sculptors,* 1910. *A Handbook of Greek Sculpture,* 1896. — S. KEKULÉ: *Die griechische Skulptur,* 1907. — Ch. WALDSTEIN: *Essays on the Art of Phidias,* 1885. — P. NICOLE: *Le procès de Phidias,* 1910. — M. COLIGNON: *Histoire de la sculpture grecque,* 1907. — K. KLEIN: *Euphronios,* 1879. — R. RAYET: *La céramique grecque,* 1888. — G. NICOLE: *Meidias,* 1908. — A. FAIRBANKS: *Athenian White Lekytoi,* 1907.

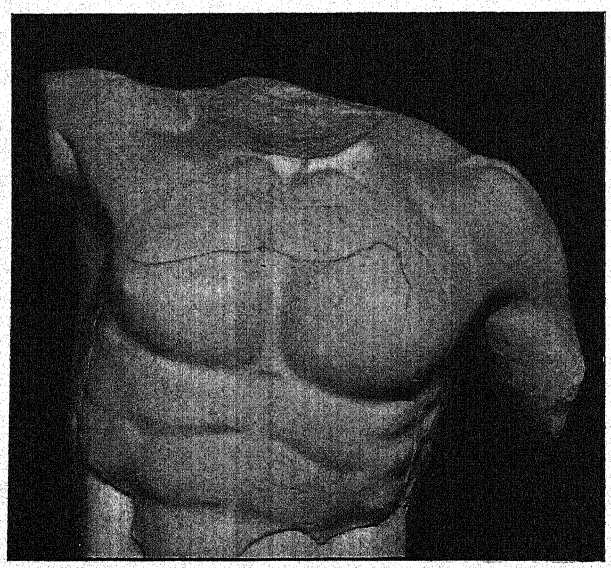


Fig. 453. — Torso of Neptune. PARTHENON.

Fig. 454.— Tombs of the Ceramicus. ATHENS.

CHAPTER XV

THE PUPILS OF PHIDIAS.— GREAT SCULPTORS OF THE FOURTH CENTURY.
PRAXITELES AND HIS PUPILS.— SCOPAS AND LYSIPPUS.
GREEK PAINTING IN THE FOURTH CENTURY.

POLITICALLY speaking, the rule of Pericles proved fatal to the whole of Greece. The preeminent position, which he attempted to secure for Athens, awakened the jealousy of Sparta and provoked the contest between the different states of Greece, known as the Peloponnesian War. As a matter of fact, this was really the ancient antagonism between the Dorians and Ionians, which flamed up anew and set them at one another's throats. Athens attempted to injure her rival by attacking the allies of the latter in the Greek colonies of Sicily, but was soon obliged to raise the siege of Syracuse, and the Athenians were finally humiliated in the naval disaster of Aegospotami. Sparta and the other Peloponnesian cities of the Dorian League set up a monument in the national sanctuary of Delphi to commemorate their victory. This was a group of statues of Lysander, the commander of the victorious fleet, and of the Peloponnesian generals. It was still greatly admired in the time of Pausanias and was a demonstration of the prestige of the Dorian bronze-workers. This was the

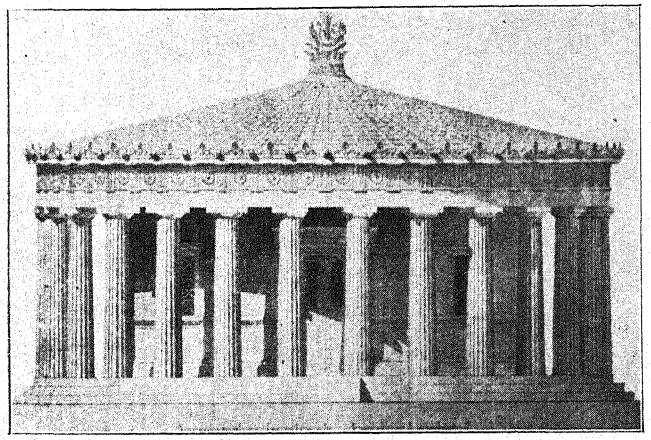


Fig. 455. — Restoration of the *tholos* of Epidaurus. *(Kabbadias.)*

work of the Dorian schools of Argos and Sicyon and indicated that there were still artists among the followers of Polycleitus, who were able successfully to compete with the Athenian sculptors of the school of Phidias.

The victory of the Dorians resulted in one of the great artists of Athens being attracted to the Peloponnesus. This was Ictinus, the architect of the Parthenon, who was entrusted with a number of commissions from the various Dorian cities. The temple of Apollo in Phigalia was his work, as has already been mentioned. Later, we shall see another artist of the Athenian school, Scopas, superintending the construction of the temple of Minerva Alea at Tegea, also in the Peloponnesus, and finally rebuilding the Doric sanctuary of Asclepius at Epidaurus with a combination of richness and good taste which is remarkable. The sacred enclosure at Epidaurus, like those of Delphi and Olympia, was surrounded by a peribolos. It appears to have been richly endowed with votive offerings of the sick who went there to recover their health, for a large number of inscriptions have been found recording the cures which were effected there. The exploration of this site was inaugurated under the auspices of the Archaeological Society of Athens, and was directed by Kabbadias, a Greek archaeologist, who had been educated in Germany. The Archaeological Society also founded a small museum at Epidaurus which contains the sculptures which were found on that site. Few remains, practically only those of the pediments, were found belonging to the great

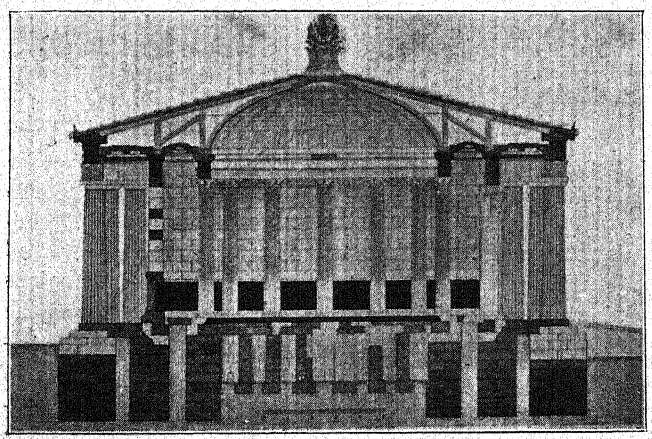


Fig. 456.— Cross-section of the *tholos* of Epidaurus.

temple of Asclepius, but a large number of architectural fragments were found of a *tholos* or circular building. It is in this building where the sacrifices were probably offered (figures 455 and 456).

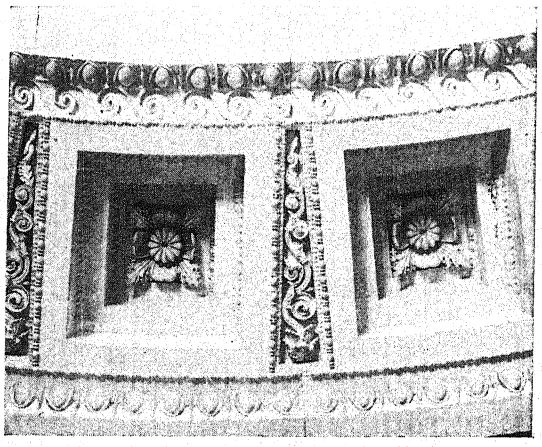


Fig. 457. — Marble panels from the outer colonnade of the *tholos* of Epidaurus.

All these remains of the *tholos* are of the finest workmanship (fig. 457), their elegance even surpasses that of the mouldings and ornamental work of the Erechtheum, which seemed to be the highest perfection possible in work of that sort. The charm of this building is enhanced by its circular form, which is that of the temples in which the mysteries were performed in Samothrace, of the Philippeum, erected by Philip at Olympia (fig. 459), and of the graceful aedicula at Athens, commemorating a certain dramatic triumph and known as the Lantern of Lysicrates. The last is a most attractive little monument ornamented with a delicately carved acanthus pattern, which indicates that Athens also shared in the new architectural tastes of this period (fig. 458).

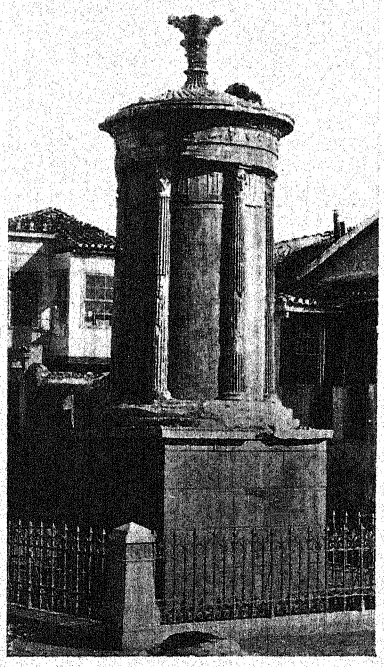


Fig. 458.— Lysicrates' Lantern. ATHENS.

Athens soon recovered her supremacy in sculpture. Although Pericles did not succeed in creating the ideal city, which he planned to make supreme by his victories in war as well as by his own moral superiority in times of peace, nevertheless, he did create in Athens a society, which, by its elegance and refinement, became the arbiter of all Greece in matters of taste throughout the fourth century. It was no longer a period of new construction. To build such a monument as the Parthenon, a political vigor and a strong guiding will were needed, such as existed in the time of Pericles. We have good reason to believe, however, that during the intervals between the great campaigns of the war, undertakings already begun on the Acropolis, in Eleusis and at the Piraeus, were now completed. But the

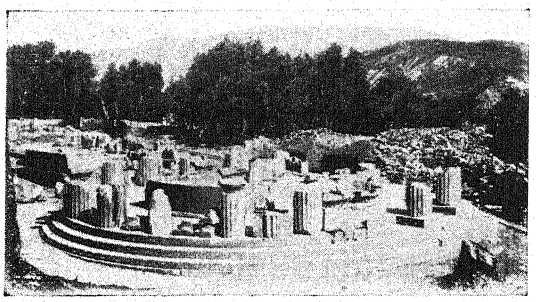
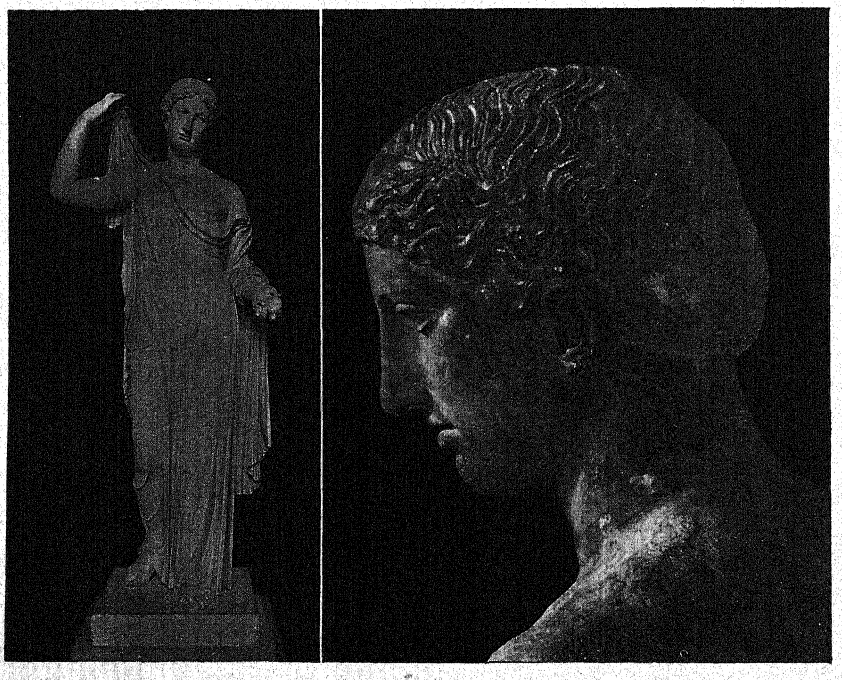


Fig. 459.—Ruins of the Philippeum. OLYMPIA.

artists generally worked alone, each in his own workshop. Many anecdotes have come down to us of the sculptors and painters of this period, of their somewhat irregular lives, and of their comments on one another's latest works. The people of Athens shared in their rivalries and triumphs. When a sculptor succeeded in creating an immortal type, such as the Faun of Praxiteles or the Maenad of Scopas, the critics and dilettanti were prodigal with enthusiastic appreciation.

Great decorative and sculptural compositions were no longer required for the pediments of the temples, and the technique of bronze-work was neglected for the more delicate marble sculptures which permitted a finer finish and execution. Even the subject matter underwent a great change; the higher Olympian deities were no longer the favorites, but the artists turned to those more closely related to mankind, such as Venus, Mars, Cupid and the gods of forest and field. Abstract qualities were personified, like Virtue, Democracy and Peace. Portrait statues began to appear in great numbers, and instead of the victorious athlete, the charioteer or the foot-racer, we have the dramatic poet or the ora-



Figs. 460 & 461. — The Venus of Alcamenes. *(Louvre.)* The head is in the Museum of Naples.

tor. The triumphs of the stadium have given way to those of the forum.

Athens was humiliated in war, but finally triumphed spiritually, though not in the political and moral sense intended by Pericles. All through the fourth century, the various schools of Greek sculpture derived much of their inspiration from the art of the period when the great architectural monuments were being erected upon the Acropolis. Although Phidias was exiled for his alleged theft of the ivory of Minerva, his pupils continued to work at the Parthenon which was not yet completed. Certain fundamentals, such as his marvelous treatment of drapery and his perfect and splendid technique, held sway in Athenian sculpture all during the fourth century B.C.

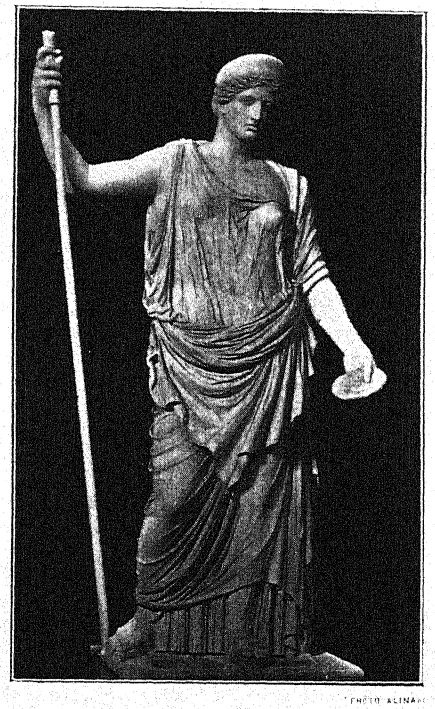


Fig. 462.—Juno. *(Museum of the Vatican.)*

We have but little precise knowledge of the generation of artists which worked directly under Phidias and which carried on his projects after his exile. The writers of antiquity give us some account of them, but it is difficult to identify their work among the many statues which have come down to us from this period.

Of Cresilas, we are only certain of the bust of Pericles, possibly the Amazon also. Altogether too many copies of other Greek originals have been ascribed to him on the basis of these two works. Of Callimachus, we know that he must have worked in Athens in the fifth century, because he made the famous lamp of the Erechtheum. He appears to have possessed the most marked personality of the entire school; the ancients found it difficult to explain his subtle style. "Elegantia et subtilitas artis marmoriae." It is believed that we have several copies of the famous "Venus in the Gardens" by Alcamenes, another sculptor of this school. The best of these is a statue in the Louvre, which is supposed to have been discovered at Frejus in Provence, and in which the transparent drapery of the Phidian school is especially noticeable (figs. 460 and 461). The serene countenance, the posture, the action, and the arrangement of the hair remind us of the statues of Phidias which stood alone and did not form part of any group.

The Venus of Alcamenes is draped like that of the frieze of the Parthenon, but one of the breasts is uncovered. The side view of the entire statue is most beautiful; the head is that of a maiden, younger than any of the previous figures of Venus.

The manner in which the teachings of Phidias were transmitted from one

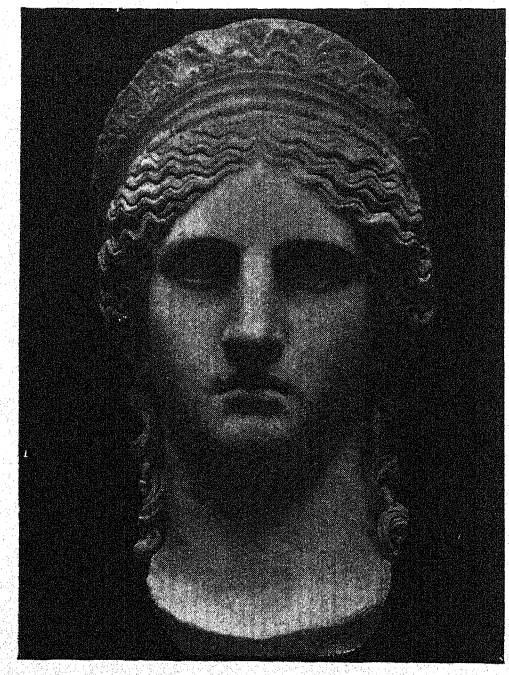


Fig. 463.— The Juno Ludovisi. *(Museum delle Terme.)*

generation to another is shown by the history of a family of artists in which the secrets of their art were passed on from father to son during four generations. This dynasty, as we might call it, began with a sculptor called Praxiteles the Elder. He was somewhat older than Phidias and was associated with the great master in the work of beautifying the Acropolis. It is not unlikely that he assisted in the execution of the great bronze Minerva Promachus. Tradition points to him as the creator of a Juno in the temple of Plataea, which has come down to us in a number of Roman copies (fig. 462) and was probably the original of a well known type. We see the work of the school of Phidias in the graceful arrangement of the folds of the tunic and mantle, the dignified and majestic lines of which were a salient characteristic of that school. The tunic slips a little, revealing the beautiful shoulders, and the figure is a magnificent representation of the mother of the gods. The posture is very dignified; one foot supports the body, while the other, a little to the rear, balances its weight, like many statues dating from the fifth century. If this statue is a copy of the Juno of Plataea, Praxiteles the Elder was surely one of the great sculptors of his time.

This type, although somewhat modified, must have served as the model of the famous head of Juno from the Ludovisi collection, now in the Museum delle Terme (fig. 463). This head has not the strength of the original type, and it is easy to understand how it has been mistaken for the portrait of a deified empress. Nevertheless, its very size gives it something of the grandeur of the colossal statues of antiquity, a majestic effect, which greatly impressed the poet Goethe. He looked upon this great head and that of the Jupiter of Otricoli, also a later work, as prototypes of the true immortals, and took casts of both of them home with him, for which he never lost his admiration.

Cephisodotus was the son and pupil of Praxiteles the Elder, and it is interesting to observe a certain style of transition in the only work which we may safely ascribe to him. This is in the Museum of Munich and is a copy of his group of Eirene and Plutus, who were Peace and Wealth, personified (fig. 464). It expresses the hopes of earlier and happier times, now reawakened in the hearts of the Athenians at the close of the war with Sparta. The straight folds

Fig. 464.—Eirene and Plutus, by Cephisodotus.
(Museum of Munich.)

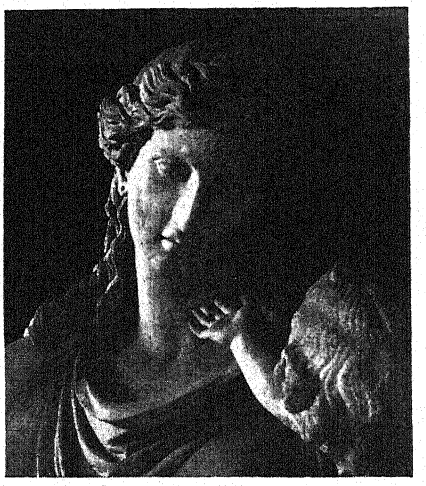


Fig. 465. — Head of Eirene, by Cephisodotus.
(Museum of Munich.)

of the peplum of Eirene recall those of the caryatids of the Erechtheum; the attitude of the figure, which rests its weight on one foot, reminds us of the Juno of Plataea and other works directly inspired by Phidias. There is something new in the tender and maternal expression with which she regards the infant in her arms, but in both the Juno of Praxiteles the Elder and the Eirene of Cephisodotus, the composition of the type is fundamentally the same. The right foot supports the weight of the figure which is indicated by the straight folds of the drapery on that side, while the other leg is slightly bent, as shown by the slanting folds on the left side of the figure. The tenderness and delicacy of feeling shown in the face was the only sign of the new style which was soon to come. The head of Eirene is not that of an exalted and impersonal goddess, like the deities of the pediments of the Parthenon (fig. 465). This group by Cephisodotus was placed in the Areopagus and appears to have been greatly admired, for we see it reproduced upon the Athenian coins of the fourth century.

A great and far reaching revolution in the art of the Athenian school was accomplished by the masters of the second generation after Phidias. Most prominent among these was the son of Cephisodotus, named Praxiteles after his grandfather. He was the great sculptor of elegance, the interpreter of the tender passion, and the great lover of the beauty of the human form. We know little of his life, and it is curious that we are obliged to rely largely upon the accounts of his relationship with Phryne, who was his model as well as his mistress. She was a native of Thespiae, a city which was destroyed in 372 B.C.,

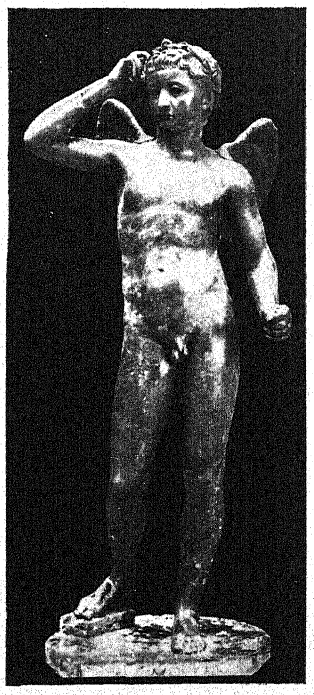


Fig. 466.— The Cupid of Madhia.
(Museum of the Bardo.) TUNIS.

during the war. From another source, we learn that she was an old woman in the time of Alexander. As she was young and at the height of her beauty when she was the model of Praxiteles, this was probably between 360 and 350 B.C. Praxiteles was already a famous sculptor at this time, and rich enough to possess a model so highly prized. Four centuries later, the guides of Athens used to point out to tourists, such as Pausanias, the statue of a Faun which was on the Street of Tripods and which dated from the period of this love affair. Praxiteles, who may not have had the utmost confidence in Phryne's taste, did not always tell her his opinions on matters of art. The anecdote is related, that she once availed herself of a clever ruse in order to learn which statue the master prized most highly. One evening, when he was paying her a visit, she had one of his slaves come crying to the sculptor that his house was on fire. He unconsciously evaded the answer sought, saying that he would not mind the misfortune if only his Faun and Cupid were saved. She secured from her lover the gift of these two favorite statues and later donated to the city of Athens the Faun, which was set on the Street of Tripods. She presented the Cupid to her native city, Thespiae, now rebuilt, to which Roman art-lovers flocked to view this statue, until Nero finally carried it off to Rome. As the poets of the anthology said, it was "a Love, which was the price of love."

These statues, which figure in the story of Phryne, have not been identified with absolute certainty, but it is supposed that the Cupid of Thespiae was the original of the beautiful statue of a winged youth in the Vatican; two copies exist in Turin and Naples (fig. 467). The latter is a delicately formed youth with thick hair; his face wears a tender dreamy expression, and his body

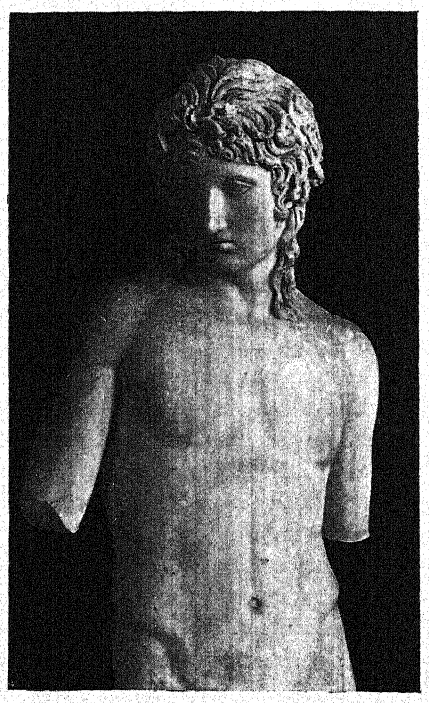


Fig. 467.— The Cupid of Centocelle.
(Museum of the Vatican.)

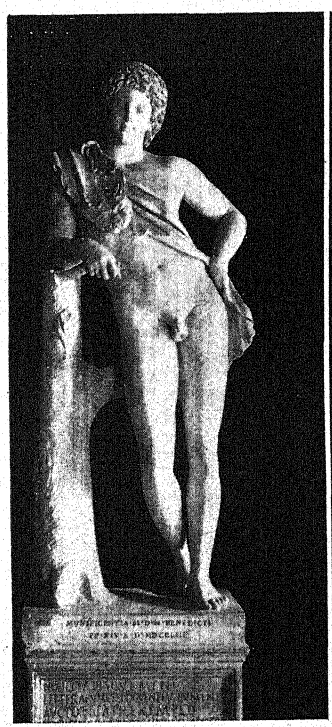


Fig. 468. — The satyr of Praxiteles.
(Capitolium Museum.)

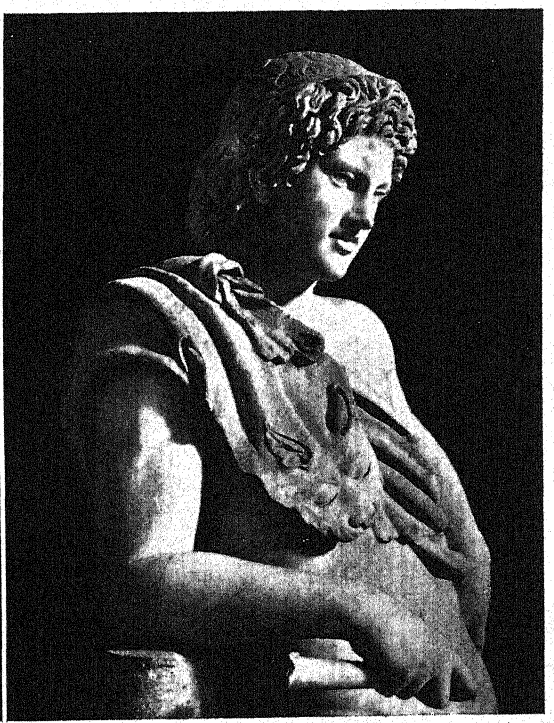


Fig. 469. — Head and bust of the satyr of Praxiteles.
(Capitolium Museum.)

has the soft mellow moulding which characterizes all the figures carved by Praxiteles. There is another little statue of Love which is also executed in the style of this courtly Athenian sculptor; it is a handsome bronze, recently discovered in the ancient wreck of a Greek ship which went down off the coast of Africa near Madhia, with all its cargo of statues and architectural fragments (fig. 466). The exploration of this curious archaeological deposit is still being carried on in Tunis by French investigators, who have made the interesting discovery that the ship was from Athens and sailed from the port of the Piraeus in the second century B.C. This proves conclusively that the types inaugurated by Praxiteles were still most highly esteemed at that period.

Various conjectures have been made regarding the Faun of the Street of Tripods, but none of these are very satisfactory. We can, however, understand something of the manner in which Praxiteles interpreted the indefinable attraction of these half human creatures, for another statue of a satyr has come down to us which is well known today and must have been very famous in ancient times. It is enough to say that it is the one so frequently reproduced by the Roman copyists (fig. 468). There was not an art collection, either in Rome or in the provinces, which did not possess a copy of the Satyr by Praxiteles, and every art museum has one today. It is the statue of a youth, idly leaning against the trunk of a tree, his feet crossed, and one hand resting upon his hip. The

Fig. 470.— Apollo Sauroctonus. *(The Louvre.)*

entire attitude is one of sensuous abandon. Looking back, we see that we are a long way from the athletic youth, the Doryphorus of Polycleitus, which the preceding century had admired as the perfect human form. The form of the Satyr of Praxiteles is rounded; not a single muscle stands out, even in the arms or legs, and the body has an almost feminine softness. A light skin is thrown over the shoulder (figs. 468 and 469). Most interesting of all is the head; the eyes and mouth suggest almost imperceptibly the expression of an animal. The ears are hidden beneath the thick hair, but the startled glance of the youth betrays his true nature. Intelligence has given place to instinct; we can imagine the creature moving forward, lightly and gracefully, with a bounding step. The best copy of the Satyr of Praxiteles is that in the Louvre, which was found at Rome, on the Palatine. Although it is badly mutilated, it is of Greek marble, and one loves to think that it may be the remains of the original, carved by the master's own hands and later lodged in the palace of the emperors.

Another characteristic statue by Praxiteles, of which many copies exist today, is a youthful Apollo called the Apollo Sauroctonus. The young god, in a playful attitude, is about to strike with his arrow a lizard which climbs the tree beside him. We see Praxiteles' preference for youthful figures in the subject chosen. The god is graceful and animated. The handsomest of the immortals has been caught in one of his happiest moments, in the playtime of youth.

The work of the master most highly esteemed in ancient times was the

body and legs and the marvelous modeling of the shoulders are amazing; the personality of the figure is so marked that it is not surprising that it aroused the interest of the ancient world more than any other statue. For all that it is a statue of Venus, we may call it chaste, for the face is free from passion. The tranquil glance betrays no consciousness of the attraction of the beautiful young form. This type of the nude Venus, coming from her bath, has been imitated over and over again, but never with the same pure inspiration.

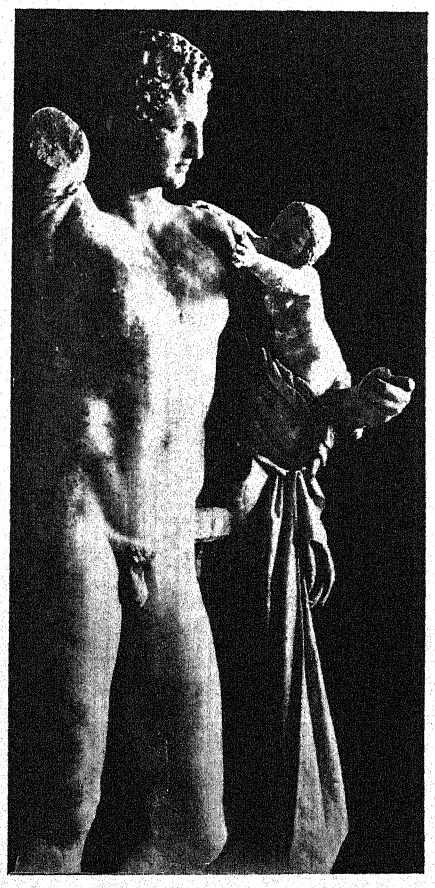


Fig. 475.—The Mercury of Praxiteles. OLYMPIA.

The bracelet which she wears on her left arm is most characteristic of Praxiteles. It is left out in the later copies, as is the severely simple jar of perfume and the folded robe which she holds in one hand, and instead, there are two small Cupids or sometimes dolphins which serve only to distract attention from the beauty of the principal figure. Here also, the weight rests on one foot, and the other knee is slightly bent so that this leg is of little support. The jar and drapery are therefore mechanically necessary to hold the figure erect. We know this to be the Cnidian Venus from the coins of this little Ionian city, on which it is easily recognized. The original statue remained in Cnidus all through the Roman period. During the Middle Ages it was carried off to Constantinople, where it was long the pride of the collection of a wealthy lover of art.

Thus far we have considered only those works of Praxiteles which we know through copies and doubtful restorations, but the great master has been more fortunate than Phidias, whose works have all been marred by time and by the hand of man. Modern excavations have brought to light three authentic marble statues, carved by Praxiteles himself, which have also been described by the writers of antiquity. One is the group of Mercury and Bacchus from Olympia, discovered in 1877 in the Old Temple of Juno. Pausanias noticed it among a number of archaic ex votos and says: "There are also a number of later sculptures, among them a marble statue of Mercury, bearing in his arms the infant Bacchus, which was the work of Praxiteles." It is believed that this group in Olympia was carved during the youth of the sculptor; we know that

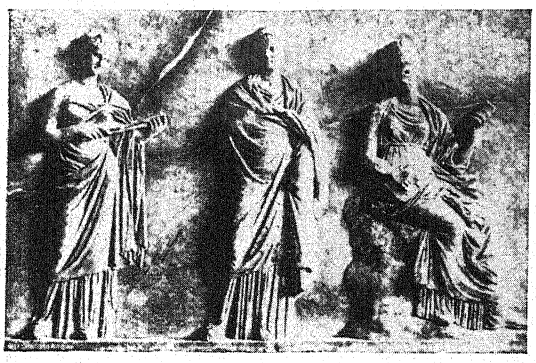


Fig. 476.— The Muses. Carved slabs from the temple of Mantinea. *(Museum of Athens.)*

Fig. 477.—Eubuleus from Eleusis. *(Museum of Athens.)*

his father, Cephisodotus, had made this the subject of one of his own compositions, and it seems safe to say that this group by the young Praxiteles is, after the sculptures of the Parthenon, the finest marble statue that has come down to us from ancient times (fig. 475). It is now in the little museum of Olympia, and those who have seen it will always remember the charm of its mysterious perfection. The surface has a soft, pearllike quality, which seems to give the body a more than human sensitiveness. The legs and one of the arms are broken, but the head is intact. The forehead, nose and lips are perfectly preserved; not a scratch mars the pure countenance of the brother of the Cnidian Venus.

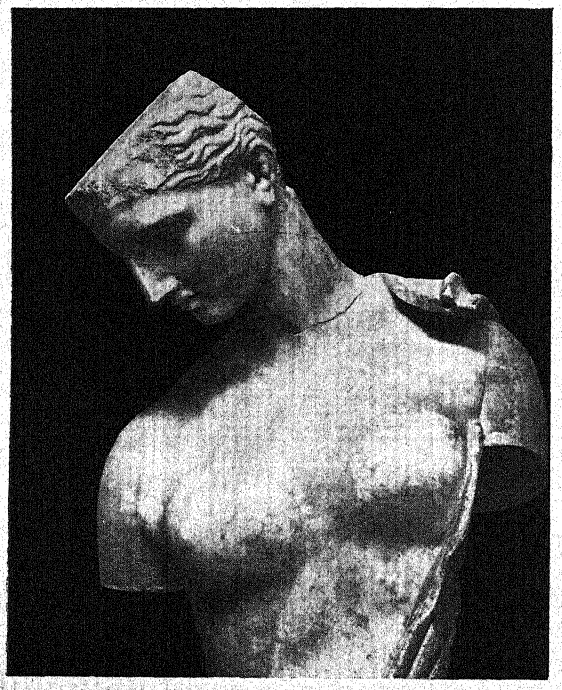


PHOTO OF THE ROTOGRAPHIC CO.

Fig. 478.—Torso of Psyche. *(Museum of Naples.)*

The god bears on his left arm the child Bacchus; in his right hand was a cluster of grapes, to which the child reached out his hand. The figure of Mercury is sustained by the mantle which hangs from his left arm. This is the same device by which the slightly bent figure of the Cnidian Venus, while apparently carrying the robe which hangs down over the jar, is really stabilized and partly supported. A bronze-worker would not have been obliged to resort to such

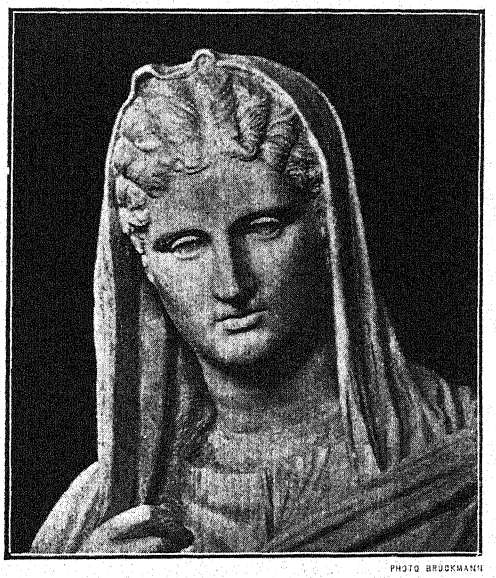


Fig. 479. — Head of the large funeral statue from Herculaneum. *(Museum of Dresden.)*

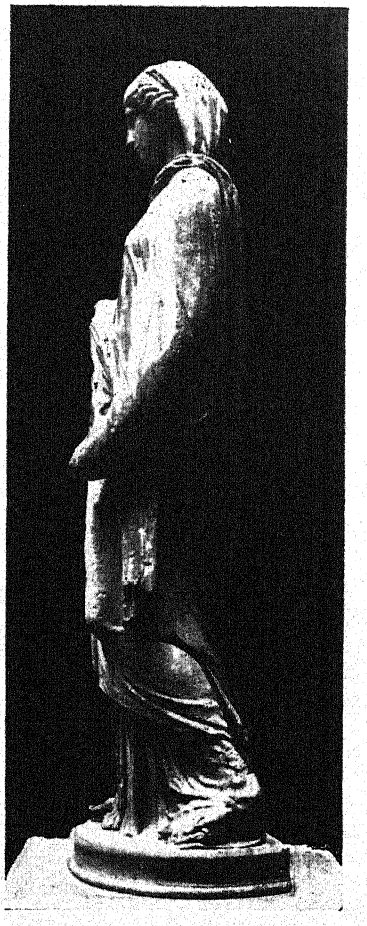


Fig. 480. — Funeral statue. *(British Museum.)*

an expedient, but Praxiteles employed it in a manner both natural and artistic. Neither the Cnidian Venus nor this group of Mercury and Bacchus lose any of their charm through the use of the drapery, the straight folds of which form an agreeable contrast to the soft curves of their youthful forms.

Another of the works of Praxiteles, which we recognize from the description by Pausanias, is the carved base which supported a sculptural group in Mantinea, also his work. The learned traveller rather carelessly remarks that there was in Mantinea a large sculptural group, the base of which was carved in relief representing the Muses and Marsyas playing on the flutes. This is sufficient to enable us to identify these reliefs, which were found, face down, among the slabs which paved the floor of a Byzantine church. They are of the greatest importance to the history of art, for we learn from these reliefs of the Muses the style of Praxiteles in carving robed female figures. In this he was much imitated, but the Muses of Mantinea are more than a stylistic model; they are indeed worthy of the master. They are calm and dignified, but their loose mantles do not entirely conceal the soft curves of their lovely figures (fig. 476).

Perhaps another work of Praxiteles discovered in the course of the archaelogical exploration of Greece, is the head of the young Eubuleus, which

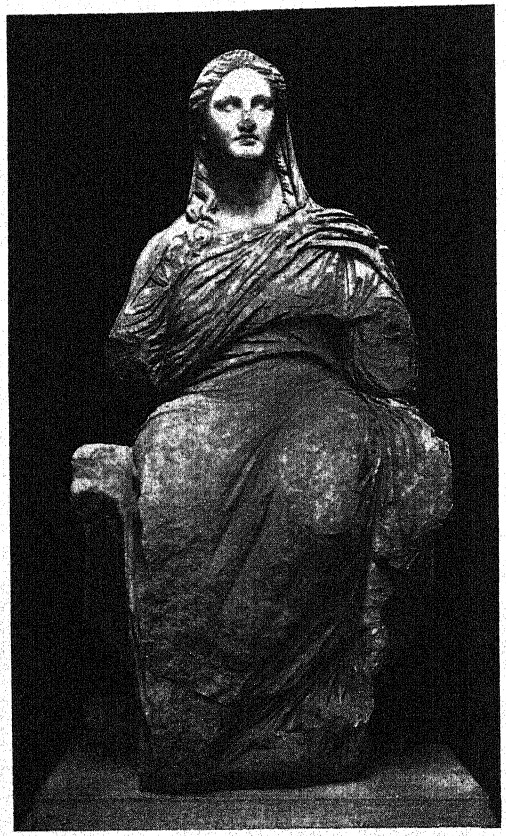


Fig. 481.— The Cnidian Ceres. *(British Museum.)*

was found in the ruins of the sanctuary of Eleusis. A number of Roman copies of this head are well known; moreover we have inscriptions informing us that there was an Eubuleus of Praxiteles. As he was only worshipped in the temple of the mysteries, we may feel assured that this was the original marble, carved by Praxiteles himself for the temple of Eleusis. The head of this pensive youth (Eubuleus means the good leader or the good counsellor) might be taken for a bust by one of the sculptors of the Italian Renaissance, inspired by the ideals of a later age (fig. 477).

The treatment of the hair is worthy of Donatello; indeed, one of the most characteristic and peculiar features of the statues of Praxiteles is the beautiful curly hair of his heroes and goddesses. The Olympian Mercury has the same charming curls surrounding his face like a nimbus, and the lovely hair of the Cnidian Venus, with an art which is admirable, is bound by two fillets.

From the authentic work of Praxiteles we will pass on to the statues ascribed to him, some with good reason, and others by mere conjecture. The head and virginal body of the so-called Psyche in the Museum of Naples are entirely in the style of the great sculptor. An expression of anticipation animates the face which is singularly spiritual, and the mutilation of this marvelous statue renders its youthful beauty still more melancholy. The art of Praxiteles betrays a force and depth of feeling which often imparts to his figures a yearning expression that is almost religious, and the great interpreter of love and of the human form seems to withdraw behind a veil of contemplative mysticism (fig. 478).

This may be the reason why the sculptors of funeral statues came to draw upon him for their inspiration. Many female figures, draped in full mantles like the Muses of Mantinea, plainly show the influence of Praxiteles. These were set upon tombs, and their calm sweetness was intended as a tribute to the loved one within the sepulchre. Perhaps the best examples of this type are the large and small Herculanean figures in the Dresden Museum, which were found at

Herculaneum. These were Roman work (fig. 479), but the one in the British Museum, which is reproduced here, is of the same type and is from Greece (fig. 480). Another, carved in the style of Praxiteles, is the seated figure found in Cnidus and now in the British Museum. Critics believe that this is a representation of Ceres, the personification of Mother Earth, but it is very possible that it is only an idealized portrait statue, which was set upon the tomb of the person for whom it was intended (figure 481). Whether goddess or mortal, its dignity and noble grace compel our admiration. There is no indication of a personal grief in this statue, nor does the face seem to be that of a mortal woman. One feels that this wealthy and honored Cnidian matron, if such she was, was merged into the divinity of Ceres, blessing the fields from her abiding place in the heart of the earth and bringing forth the ears of grain.

Fig. 482. — Funeral portrait head. *(Museum delle Terme.)*

Fig. 483.— The Fanciulla of Anzio. *(Museum delle Terme.)*

These funeral portrait statues, executed in the style of Praxiteles, seem to have been confined to a rather limited series of types, followed by the sculptors of the fourth century. There are a number of replicas of a woman's head wrapped in a thick scarf. Only the upper part of the face, which is most beautiful, is revealed, and neither the attitude of the figure nor the expression of the face seem to be particularly suited to a funeral statue (fig. 482). Then we have the type of a seated figure, and another of a standing maiden robed in a loose mantle. These occur repeatedly, but the lines of the face are never sufficiently accentuated to produce an actual portrait of the deceased.

Coming to the pupils of Praxiteles, we shall first mention his son, although he was not the most famous among them. He was the fourth sculptor in this family and was named Cephisodotus for his grandfather. To this Cephisodotus the Younger, the so called *fanciulla,* or maiden, of Anzio has recently been ascribed. This was found in the ruins of a villa on the seashore which belonged to Nero. It is believed by some that it is not a priestess, but a youth.

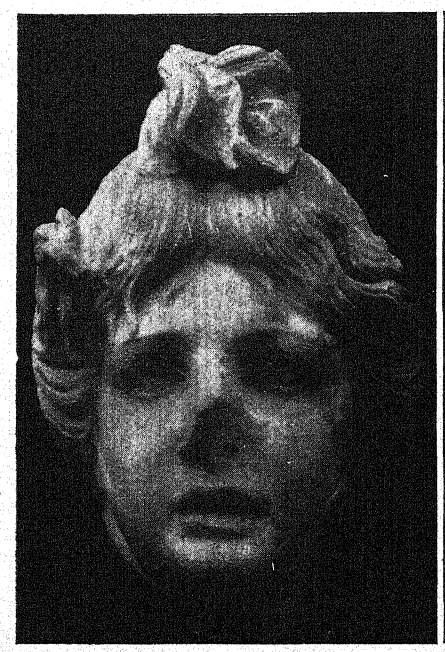


Fig. 484. — The Apollo Castellani.
(British Museum.)

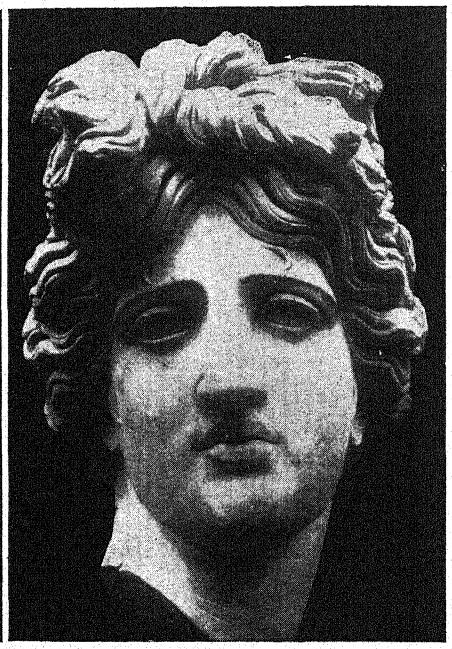


Fig. 485. — The Apollo Pourtalés.
(British Museum.)

who resembles a woman in the long robe of the priestly neophyte (fig. 483). The sex of the figure has not yet been determined, but that does not lessen our admiration for its beauty. The hair is bound above the forehead, and the head is devoutly bowed over a tray on which a laurel branch and instruments for purification lie. The body is covered by a heavy woolen mantle wrapped about the waist but leaving one of the shoulders bare. The statue is Greek beyond a doubt, but it is ascribed to the son of Praxiteles, only because its style bears some resemblance to that of a bust of Menander which ancient writers assure us is the work of this artist.

Another pupil of Praxiteles, Leochares, carved a group representing Ganymede borne aloft by the eagle, of which the Museum of the Vatican contains a copy. A pleasing detail of this composition is the shepherd's dog, barking as he sees his master suspended in the air. This is a survival of that purely physical, we might almost say animal, aspect of life and nature, which was a part of the Praxitelean *gamma*. It has been thought that Leochares was the creator of the famous Apollo Belvedere, but there is more reason to ascribe it to another pupil of Praxiteles, Euphranor of Corinth (fig. 486). The work of the latter is convincing proof that the style of Praxiteles was imitated in other parts of Greece. The Apollo Belvedere, so greatly admired by the Romanticists of the last century, is only the copy of an older original, which was not at all improved by the addition of the loose mantle, hanging from the arm and shoulder. The chlamys should be smaller. The angry god has just discharged an arrow from the bow

which he still holds before him, and a quiver hangs upon his shoulder. A bronze replica of the statue, dating from the Renaissance and made before the statue was restored, shows plainly that it was much finer without the disfiguring mantle (fig. 488).

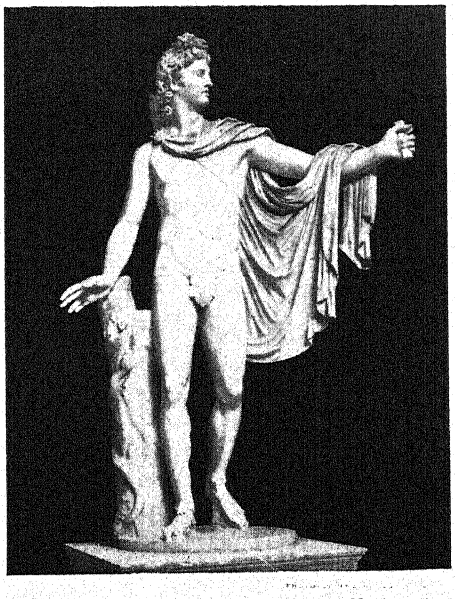


Fig. 486. — The Apollo Belvedere. *(Vatican.)*

It is difficult to account for the fact that we have but one ancient copy of the Apollo Belvedere. It must have been a very popular statue in ancient times, for we have two heads of Apollo which are very similar to that of the Belvedere, with the hair gathered up on the crown of the head. As examples of a later art, they are perhaps even more interesting than the famous statue of the Vatican (figs. 484 and 485). The Diana of Versailles, now in the Louvre, is another marble figure which is carved in the same style (fig. 487). There are no replicas of this, except the fragment of a torso found in the ruins of Italica near Seville. Both the Apollo and the Diana are represented as moving swiftly, their bodies are thrown forward, and in each, a balance is maintained by an arm somewhat extended on either side. The pupils of Praxiteles naturally reproduced his favorite models, but, strangely enough, the nude Venus was not completely accepted for some time. More often the goddess was draped below the waist, as shown by the three famous examples of this type: the Venus of Milo, the Venus of Arles, and the Venus of Capua. The Venus of Arles, now in the Louvre, appears to be a Greek original, but this magnificent marble has been injured by the scrubbing and polishing it received in order to present a clean and shining statue to Louis XIV. In spite of this, it is still a beautiful sculpture. The cheeks, no doubt, have lost something of their youthful rounded form as the result of

Fig. 487. — The Diana of Versailles. *(Louvre.)*

Fig. 488.
Renaissance bronze.
(Stroganoff Collection.)
PETROGRAD.

the ill advised cleaning, but the face is still charming, and the slightly inclined head expresses a womanly delicacy of feeling that is most attractive (fig. 489).

The Venus of Milo also suffered misfortune; it was discovered on the Island of Melos in 1822, broken into a number of fragments. With it was a part of the pedestal, inscribed with the name of the sculptor, a certain Alexandros. The fragment of the pedestal and parts of the arms were lost in the Louvre and have never been found. Alexandros was apparently a sculptor of the Alexandrian period, but his statue was a copy of an older model (fig. 490). The posture is unusual; the goddess stands erect on one foot, while the other rested upon a step of some sort which formed part of the lost pedestal with the inscription. One of the hands lightly held up the mantle enfolding her lower limbs; the other was extended and bore the apple which was the prize awarded her by the judgment of Paris. The Venus of Capua reproduces the same type with a few variations. The latter was also copied in the seminude victory figures which bend over the shield on which they inscribe a record of great deeds.

The half draped Venus with a mantle covering her lower limbs, like the Venus of Arles and of Milo, is one of the types followed by another famous sculptor of the Fourth Century, who was as great and talented as Praxiteles; this was Scopas. He was possibly a little older than Praxiteles, and they probably knew one another at Athens and may have even worked together. Unlike Praxiteles, Scopas was not an *Athenian of Athens,* nor did he have the prestige accruing to the third generation of a famous family of artists. His father is supposed to have been an obscure sculptor of the Island of Paros, named Aristander, and the son probably came to Athens, poor and unknown,

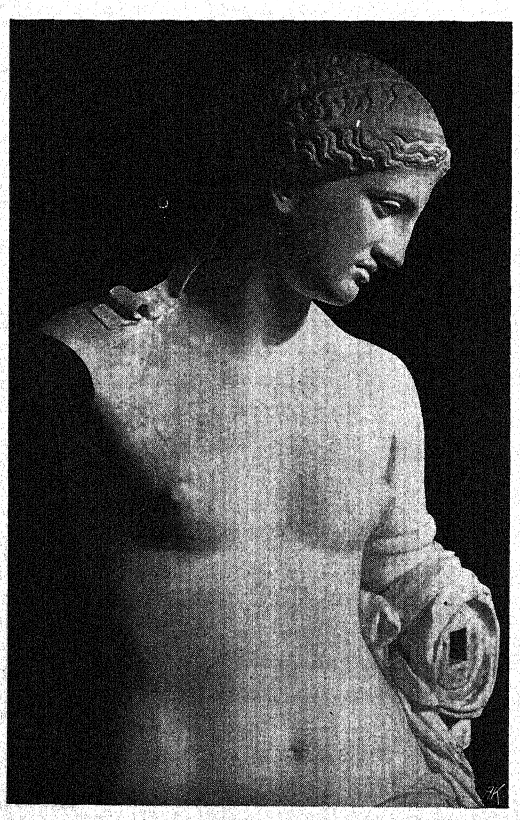


Fig. 489. — Venus of Arles. *(Louvre.)*

where he developed his tragic genius in the school of loneliness and privation. He seems to have been of a studious disposition; his personifications of philosophical abstractions show that he was versed in the most advanced ideas of his time. His pensive sadness forms a marked contrast to Praxiteles' joyous love of beauty. The sculptures of Scopas bear a tragic message which even poetry and music could hardly express. While Praxiteles loved a sweet abandon and a dreamy composure, Scopas caught his subjects in a moment of pain and affliction. The sensuous relaxation of the Satyr of Praxiteles contrasts strongly with the extatic madness of the Maenad of Scopas, as she holds up the kid which she has just sacrificed to Pan.

Fig. 490. — The Venus of Milo. *(Museum of Louvre.)*

We have little positive information regarding this Maenad of Scopas, which was his most famous work. A few years ago it was supposed to have been the original of a small Roman copy in the Museum of Vienna, but critics are now rather sceptical of this identification. We must, therefore, content ourselves with the descriptions of the poets of the Anthology who tell us of the furious folly of this raving Bacchante.

The tragic genius of Scopas is also reflected in his calmer figures. There are a number of mutilated replicas of his statue of Meleager, the young hunter, preparing to hunt the Calydonian boar. He seems to have a premonition of his tragic fate, and although he hesitates, he steels his heart with firm resolution (fig. 491). Another beautiful head, that of a youthful athlete, has recently been acquired by a New York museum (fig. 492).

It was natural that the serious temperament of Scopas should be drawn toward architectural sculpture. He was the last great sculptor to undertake the difficult task of embellishing a temple pediment. Pausanias tells us that Scopas directed the reconstruction of the ancient temple of Minerva Alea near Tegea. Here, as usual, the traveller's description is rather brief. On one side of one of the pediments the hunt of the Calydonian boar was represented; on the other side was the conflict between Telephus and Achilles. Both of these themes were entirely foreign to the myth of Minerva, but Scopas preferred them because of their tragic nature. The excavation of the temple of Minerva Alea has yielded only a few fragments of this pediment, the most interesting of which are two youthful heads. The eyes of these fix their level gaze upon some distant object (figs. 493 and 494). It is evident that they are from the same hand that carved the head of Meleager, and these remains of the temple of Minerva Alea consti-

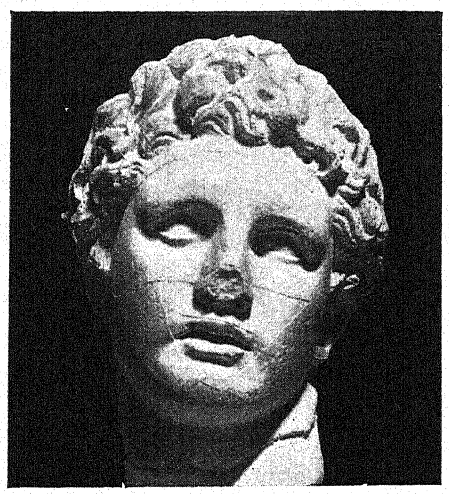


Fig. 491. — Scopas. Head of Meleager. *(Villa Medici.)* ROME.

Fig. 492. — Scopas. Head of an athlete. *(Museum of New York.)*

tute the basis of our knowledge of the style of Scopas. Gods and heroes have become more human; the serene expressions of the Phidian types have given place to a melancholy of mind and soul, and even mythological subjects are

Figs. 493 & 494. — Scopas. Heads from the temple of Minerva Alea. *(Museum of Athens.)*

treated as the symbols of human tragedy. Scopas represents the Homeric heroes as examples of the sorrows which oppress the hearts of man, just as Socrates and Plato do, when they speak of the passions of Achilles and Ulysses, whom they treat as types and not as actual historical characters.

The other fragments of the pediment sculptures of the temple of Minerva

Alea are very inferior in artistic merit to these two heads. Among them is the fairly well preserved torso of the central figure of Atalanta, which is carelessly executed, and an uninteresting fragment of the Calydonian boar. We conclude from this, either that the great genius of Scopas did not always prevent him from doing poor work, or that his collaborators were men of inferior talent, as in the case of the Mausoleum of Halicarnassus.

Pliny gives the following description of the Mausoleum: "Bryaxis, Timotheus and Leochares were contemporaries and rivals of Scopas, who also took part in the work on the Mausoleum of Halicarnassus. This was the tomb of Mausolus, king of Caria, erected by his wife Artemisia. This was one of the Seven Wonders of the World and was constructed upon a high oblong base. Upon it, there were thirty-six columns. The east façade was ornamented by Scopas; the north, by Bryaxis; the south, by Timotheus, and the west, by Leochares. Queen Artemisia died before the Mausoleum was completed, but the artists went on with the work for the sake of their own fame. The monument is surmounted by a pyramid of twenty-four steps, upon the apex of which is the marble quadriga by Pythis, at a height of one hundred and forty feet." The enormous base of the Mausoleum is believed to have contained the burial chamber. A mediaeval chronicle informs us that the Knights of St. John discovered the sarcophagus while searching for lime to be used in repairing their castle, erected on the ancient site of Halicarnassus. Sir Charles Newton explored the remains of the Mausoleum in 1857 and unearthed fragments of the frieze, which extended around the base, as well as those of the quadriga and the statues of Mausolus and Artemisia (fig. 495). This colossal monument, erected upon the coast of Asia in honor of a Persian satrap, to which so many Greek masters collaborated, is a striking evidence of the expansive force of Greek art, particularly the art of Athens. The architects are supposed to have been Satyrus and Pythis, the latter being the Ionian who built the temple of Priene. The collaboration of Scopas and Leochares indicates that the entire group of sculptors were brought from Athens by the wife of Mausolus. The subjects treated in the reliefs were those familiar to the Athenians

Fig. 495. — Statue of Mausolus.
(British Museum.)

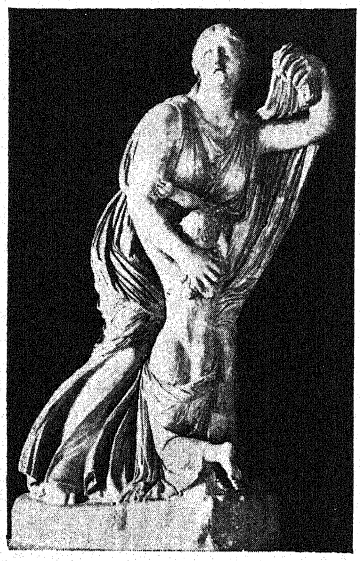


Fig. 496.—Niobe. *(Museum of Florence).*

of that period, especially the combat with the Amazons and the chariot race, in which the charioteers wore long floating garments.

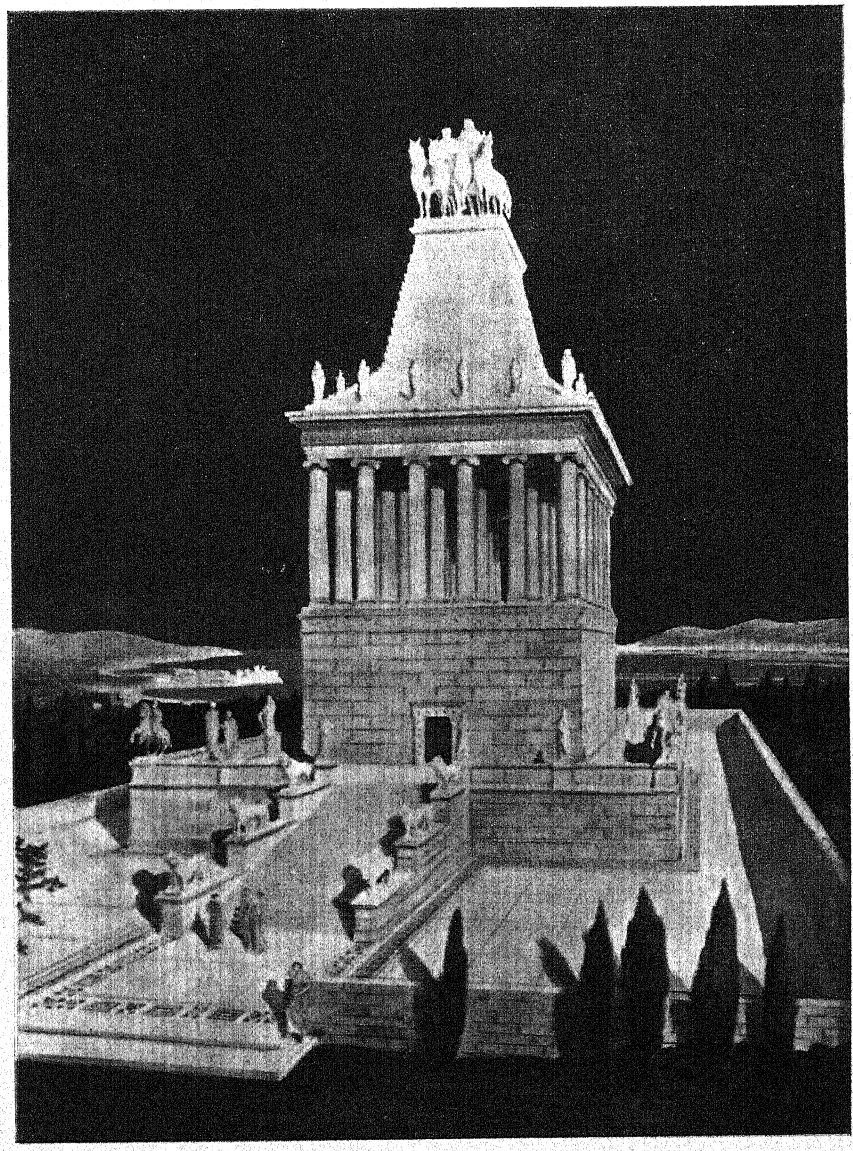
We know from Pliny's account that the fragments of a series of reliefs, discovered on the east side of the Mausoleum, were the work of Scopas, and indeed they are executed in his style. It is also believed, Pliny to the contrary notwithstanding, that the colossal statues of Mausolus and his wife, which formed a part of the quadriga, were also his work. The head of Mausolus is particularly interesting; it is very individual in its character, with the hair combed back, but the orderly folds of the drapery clothing the body, do not reveal the form beneath, as in the robed figures of Phidias. (Plate XXXIX.)

The note of sadness, which runs all through the art of Scopas, is seen in a number of so called Niobids. The tragic slaying of the children of Niobe by the arrows of Apollo and Diana seems to have attracted Scopas and his pupils. The sculptural group in the Museum of Florence is no longer as important as it was, in the history of the development of this type in the work of the great sculptors of the fourth century B.C. These figures were discovered in Rome on the site of the gardens of Sallust and were replicas or imitations of older and better statues. Nevertheless, these two figures of the group still have the moving force of the originals (fig. 496). The tender form of the young girl who seeks refuge at her mother's knees is represented, and the terrified mother tries to shield her with her mantle.

Fig. 497.—A Niobid. *(Vatican.)*

The central figure of Niobe was accompanied by others which stood alone, and a relief in Petrograd shows how these were grouped in the original composition which was somewhat different from the Florence group. One of these Niobids is in the Vatican at Rome (fig. 497), and the very folds of her mantle seem to shake and quiver at the vehemence of her terror as she flees, when she sees her brother slain by the angered gods. Such is her panic that the end of her mantle streams behind her as she runs.

We now come to the last great sculptor of the fourth century, one whose personality made a powerful impression upon the genera-



Restoration of the Mausoleum of Halicarnassus. *(British Museum.)*

tion following Scopas and Praxiteles. This was Lysippus, the favorite of Alexander who gave orders that only Lysippus should make portrait statues of him. He was not an Athenian, but a native of Sicyon, the city of Polycleitus and the home of the great bronze-workers of the preceding century. He did not, however, disdain the discoveries of the Athenian schools of Scopas and Praxiteles. Pliny tells us that he began as the apprentice of a smith, *primo acrarium fabro*, so it is evident that he did not come of a family of artists. His only school was that of life itself. The anecdote is related of him, that when he was a young man, he asked the painter, Eupompus, what master he should follow. The painter pointed to the crowd passing in the street, meaning that he should study humanity in all its aspects. Cicero says that Lysippus took the Canon of Polycleitus for his model, but this statement may have been ironical, for Lysippus boasted that he had never followed the established canon in the composition of his figures. Phidias had given expression to a magnificent idealism; Praxiteles, to a delicate elegance; Scopas, to a tragic ideal, and now we see in Lysippus a new stage in the development of Greek art, a lofty naturalism which never descends to a gross materialism. His connection with Alexander is most significant; the youthful hero in his meteoric career is a worthy model for a naturalistic sculptor. Many heads of Alexander still exist, which give us some idea of the style of Lysippus. We have the conqueror, a glorious youth with a leonine mane of hair, and we see him later prematurely aged, or

Fig. 498.— Alexander idealized. *(Museum of Vatican.)*

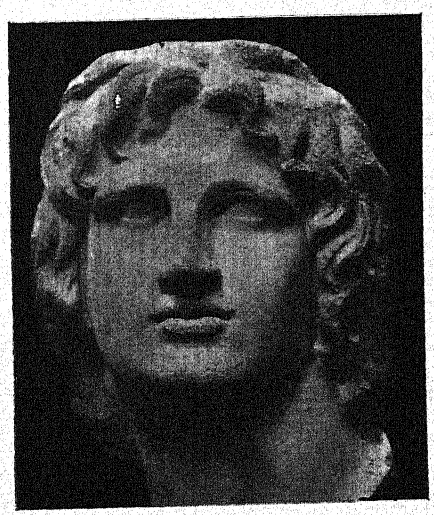


Fig. 499.—The child Alexander. *(British Museum.)*

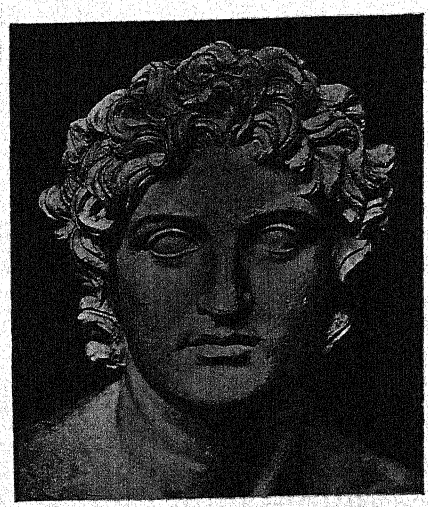


Fig. 500.—The youth Alexander. Munich.

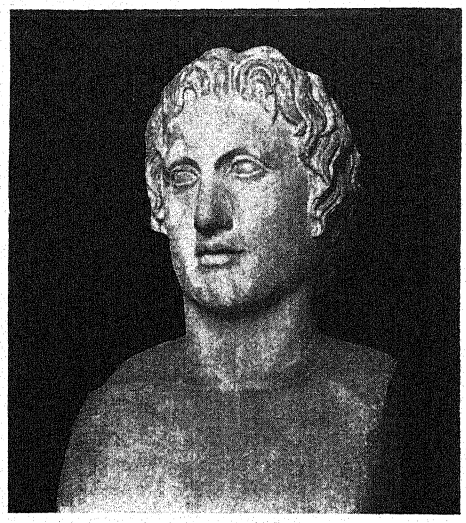


Fig. 501. — The Azara Alexander. *(Louvre.)*

even dying, his curly locks disordered like those of a sun god. Figures 498 to 501 show the same face from childhood on, but always with the same two curly locks surmounting the forehead and falling symmetrically to either side. Lysippus is the first sculptor to bring out the personal and characteristic features of his subject, even though he represents a hero like Alexander, almost a demigod. The Azara head, now in the Louvre, was the first to be identified by its inscription, which was: "Alexander, son of Philip." This piece, which has suffered from the cleaning and retouching that it has undergone, has been greatly overestimated (fig. 501). Nevertheless, it seems to have been taken from a very fine original, for recent explorations at Pergamum have resulted in the discovery of another reproduction of same type.

Next to Alexander, the favorite subject of Lysippus was Hercules, the hero whose exploits were rewarded by his admittance to the banquet of the gods. Lysippus represents him midway in his arduous career of performing the twelve labours, and it seems likely that the group of Hercules and the stag, at Palermo, is an imitation of one of the works of Lysippus (fig. 502). Sometimes he represents the hero at rest, pensively leaning upon his club. The small head of the mighty hero lends itself particularly to the new canon of Lysippus. He executed a gigantic bronze statue of Hercules resting upon his club, which was later taken to Rome. Constantine in turn carried it of to Byzantium, where it stood in the forum until 1202, when it

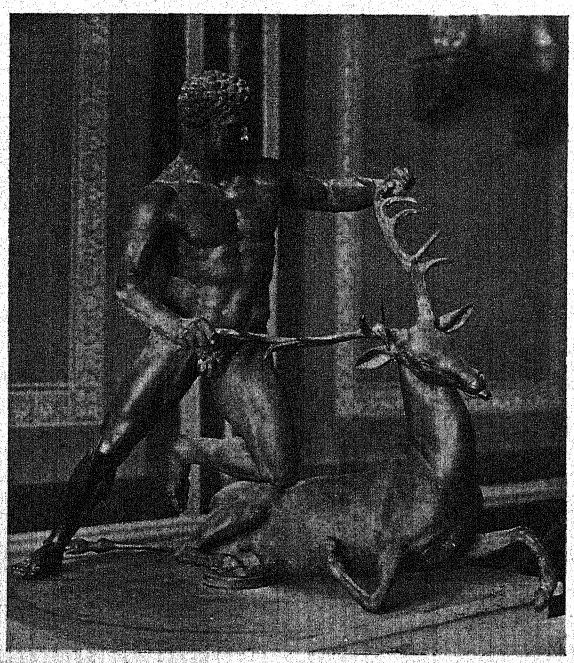


Fig. 502. — Hercules overcoming the stag. PALERMO.

was destroyed by the Crusaders. The large number of small ivory replicas of this statue which exist lead us to believe that, even in Christian Constantinople, it was thought to be the finest statue in the city. There was also the statue of Hercules feasting at the banquet of the gods. This figure was noted for the attraction which it had for Alexander, who always carried it with him on his campaigns. We have not sufficient information to identify this statue among the many seated figures of Hercules. It may have been the inspiration of the conscientious Athenian sculptor whose name is inscribed as Alexandros upon the base of the torso of Hercules Belvedere, so admired by Michael Angelo and now in the Vatican (fig. 503).

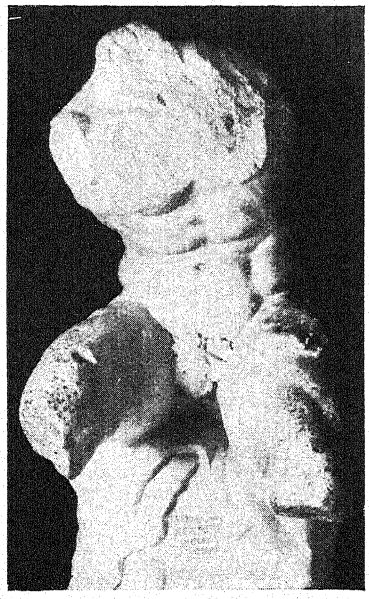


Fig. 503. — Seated Hercules Belvedere. *(Vatican Museum.)*

We also see the naturalism of Lysippus in the posture of the so-called Jason in the Louvre, resting his foot upon a step as he bends to tie his sandal (fig. 504). This position may not be original with Lysippus, for it had already been employed in the field of painting. His genius was truly eclectic, for in his many productions he found his inspiration in all that had been discovered before him. Both paintings and reliefs furnished him with subjects which no one had ever dared before to represent in the full round. This is true of the famous Mars Ludovisi, the god of war sitting in a careless attitude with his hands clasped about one knee (fig. 505). This, it is true, is an old type in Greek art; Polygnotus probably painted it in one of his frescoes early in the fifth century, for we see it later among the subjects represented by the painters of vases. The Phidian school of sculptors also copied it in the Parthenon frieze, showing the War God in the assembly of the Olympians, impatiently raising one leg and clasping his hands about the knee. Here, however, the figure is still in the field of the painter, for a relief, like a picture, is all in the same plane. The problem of carving such a figure in the full round was not attacked until the time of Lysippus.

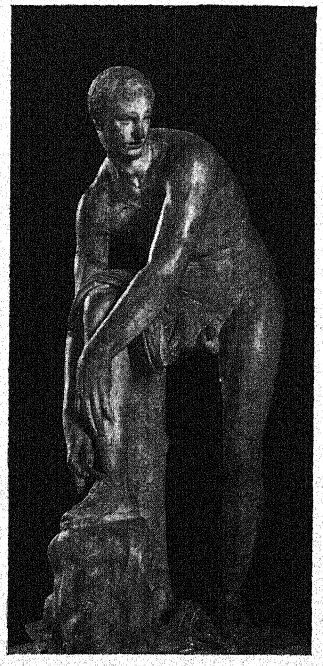


Fig. 504. — Jason. *(Louvre.)*

The type of the Mars Ludovisi has been positively ascribed to Lysippus by some critics.

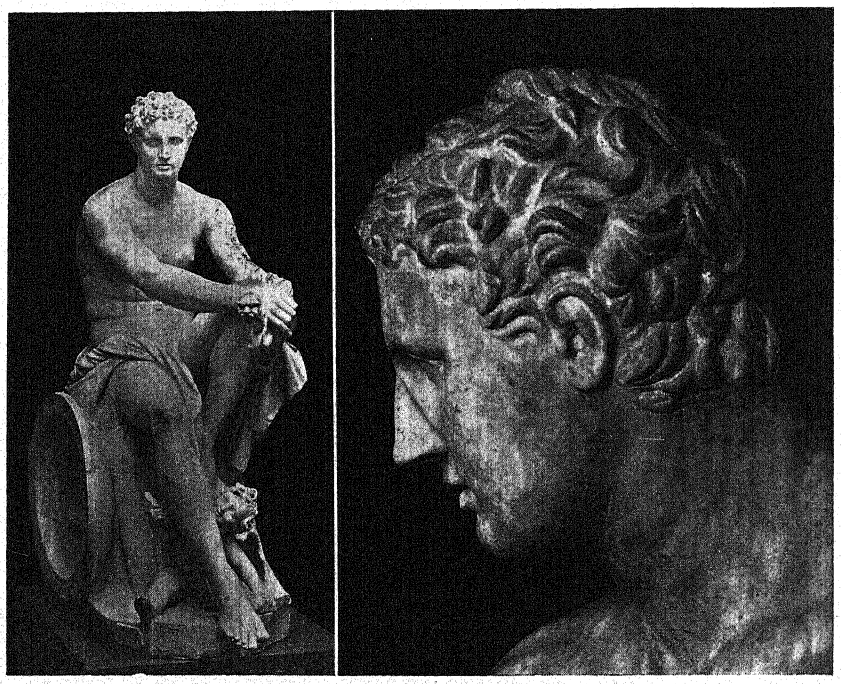


Fig. 505. — The Mars Ludovisi. *(Museum delle Terme.)*

Others are inclined to give Scopas the credit, but the head, of which there are a number of copies, is more individualized and better finished than any of the known works of Scopas. As the War God in his leisure hours was prone to love, the Mars Ludovisi is accompanied by a little Cupid, playing beside his feet. This portion of the composition is much restored, but we know that it must have existed in the original, for we see it in another copy in the Museum of Naples. This whimsical detail hardly seems consistent with what we know of the art of Scopas.

Lysippus also carved statues of the other gods, preferably those of Jupiter and Neptune. More rarely he represented women and children, which Praxiteles often did. He is said to have carved 1,500 statues in all, but we can identify only a very few of these. Only one of those mentioned by the writers of antiquity has come down to us in a good copy; this is the Apoxyomenus, discovered in Rome in 1849, and the first to give us a true idea of the style of Lysippus. This is a youthful athlete who scrapes the oil and dust from his arms with a bronze instrument. It is a new type and its proportions are very different from those of the Doryphorus and the other athletes of antiquity (figs. 506 and 507). The body is more lithe and nervous; although an athlete, the youth plainly belongs to a new and more refined social order. The head is much smaller and the face more expressive, and there is a noticeable wrinkle in the forehead and a shadow in the eyes, which recall the *pathos* of Scopas and the melancholy of Praxiteles. This is not a man of the people, a common pugilist, nor even an

A

B

C

D

ATHENIAN FUNERAL STELAE. — A and C, are of the type representing the deceased distributing her jewels. — B and D, portray the last farewells of the loved ones. *(Museum of Athens.)*

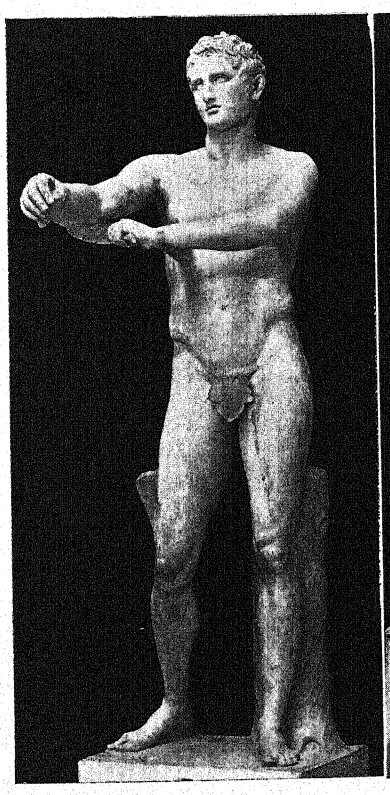


Fig. 506.—The Apoxyomenus of Lysippus. *(Vatican.)*

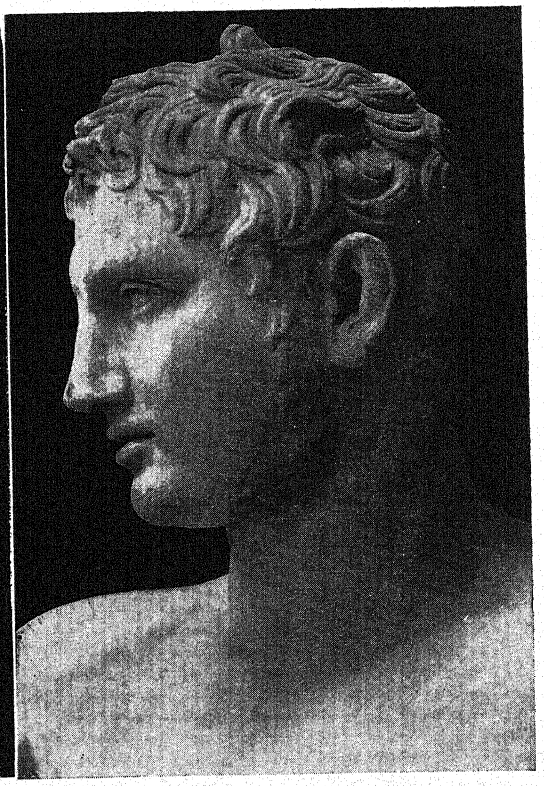


Fig. 507. —Head of the Apoxyomenus. *(Vatican.)*

ordinary athlete. The sculptor, while he does not idealize him, takes a new and higher point of view. The posture is especially interesting with the arms extended straight out from the body, projecting the figure entirely into the third dimension. The statue, executed in such a manner as to be seen advantageously from all sides, is a distinct departure from the style of the earlier sculptors who carved their statues with the expectation of their being viewed only from the front. Only Myron, two centuries before, had broken prematurely from this convention, and his Discobolus is the only precursor of the Apoxyomenus of Lysippus.

Another statue was found in Delphi in 1897 which seems to be a more accurate copy of a lost original. This is the portrait statue of a youth named Agias and formed part of a group representing the members of a princely family of Thessaly. This composition bears a poetical inscription by which the various figures could be identified, and most interesting of all, it tells us that this group was the duplicate of another existing at the home of the Thessalian prince, adding that the work was that of Lysippus. There is no doubt that this noble family of Thessaly had commissioned Lysippus to execute a bronze group of

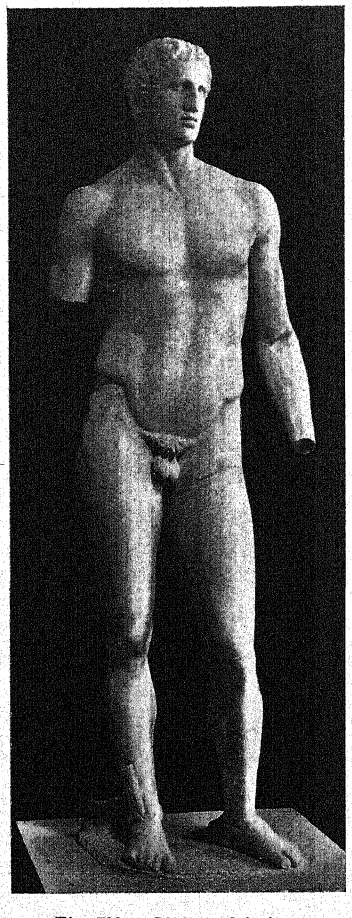


Fig. 508. — Statue of Agias by Lysippus. DELPHI.

portrait statues and presented the sanctuary with a marble copy of the same composition.

So we see that this figure of Agias, the only figure of the group with its head intact, is a faithful contemporary copy of the lost work of Lysippus (fig. 508). The figure is youthful; the body recalls somewhat the Canon of Polycleitus, so Cicero's remark may not have been so ironical after all. The head displays more originality and reminds us of the melancholy style of Scopas. The funeral statue of Ephebus of Tralles is also the work of the school of Lysippus and is now one of the most highly prized possessions of the Museum of Constantinople (fig. 509).

We see the art of the great masters reflected in the funeral statues of Athens dating from the fourth century. The cemetery was outside the quarter called the Ceramicus. Here the tombs were set along both sides of the main road from the city, which passed through this suburb, These tombs usually consist of a small base supporting the aedicula, or miniature temple embellished with a memorial relief. These must have been very numerous, for modern exploration of this site has yielded a long series of such monuments which are now in the National Museum of Athens. Besides these, many reliefs in the various museums of Europe have now been identified as being from the Ceramicus, although some were taken long ago. The Romans seem to have been great admirers of these stelae of Athens, for some of them were taken from these tombs and carried to Rome and the provinces. Later, many foreign visitors carried away with them one of these reliefs as a memento of the trip. One Greek stela was brought to Rome by the Byzantine monks of Grotaferrata during the eleventh century. The earlier English tourists found it very easy to take away one or more of these sculptures, so we now find them scattered all over the world.

In these fourth century stelae we see the great artistic innovations of Scopas and Praxiteles. They constitute an inexhaustible supply of idealized portraits of those refined and highly educated Athenians who argued with the philosophers, visited the work shops of the artists, and admired the new dramatic productions. The favorite scenes are those of the family taking leave of the dying one, with a placid affection, unagitated, but filled with a gentle sadness. The dying one is usually seated in order to give an impression of repose; the

Fig. 509. — Ephebus of Tralles.
(Museum of Constantinople.)

Fig. 510. — Stela from the Ceramicus.
(Museum of Athens.)

members of the family stand about, one of them often extending a hand toward the seated figure. Often, a woman about to die distributes the jewels with which she had adorned her beautiful form, while a maid-servant opens the little chest in which they were kept. This frequent repetition of a favorite subject is characteristic of all Greek art, which voluntarily limited itself to a comparatively small number of types. Plate XL show us the manner in which the same model was preserved or altered according to the wish of the patron.

Some of these stelae depart from the usual types, and the types themselves are varied. A girl is represented with a small jar of perfume in her hand (fig. 510); an intellectual looking young man sits reading his favorite author in the solemn repose of the tomb (fig. 511); two sisters draw aside the veils from their faces (fig. 512). Most of these are genre scenes, and nowhere do we see the subjects of the heroic compositions of the preceding century. Among the Asiatic Greeks the favorite mode of burial was a sarcophagus, some of which were monumental in size. (Plate XLI.)

It is interesting to note that the paintings of this period were also derived from the great decorative frescoes of the buildings and monuments. Greek paint-

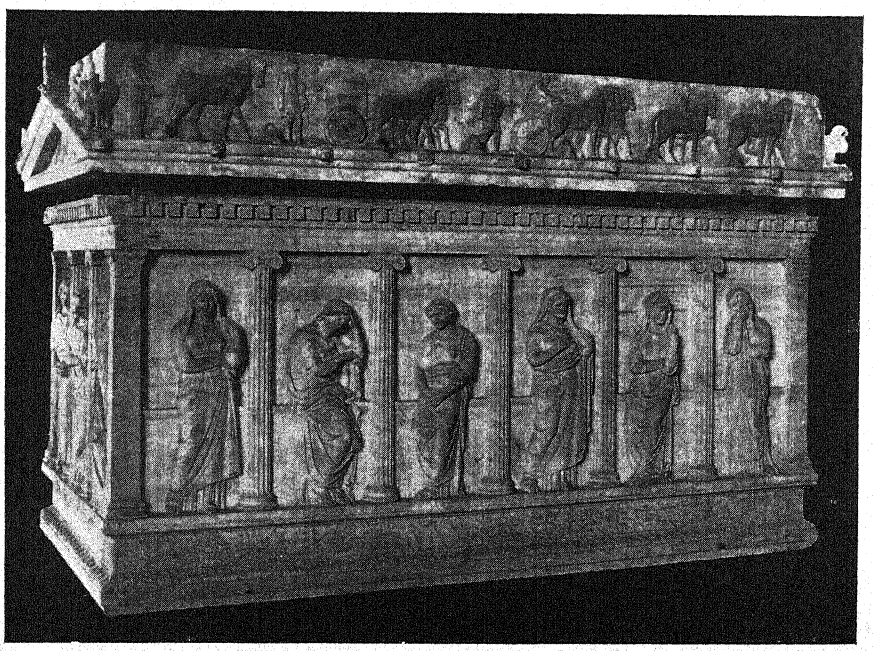
Fig. 511. — Athenian stela.
(Monastery of Grotaferrata.)

Fig. 512. — Stela of Demetria and Pamphila.
(Museum of Athens.)

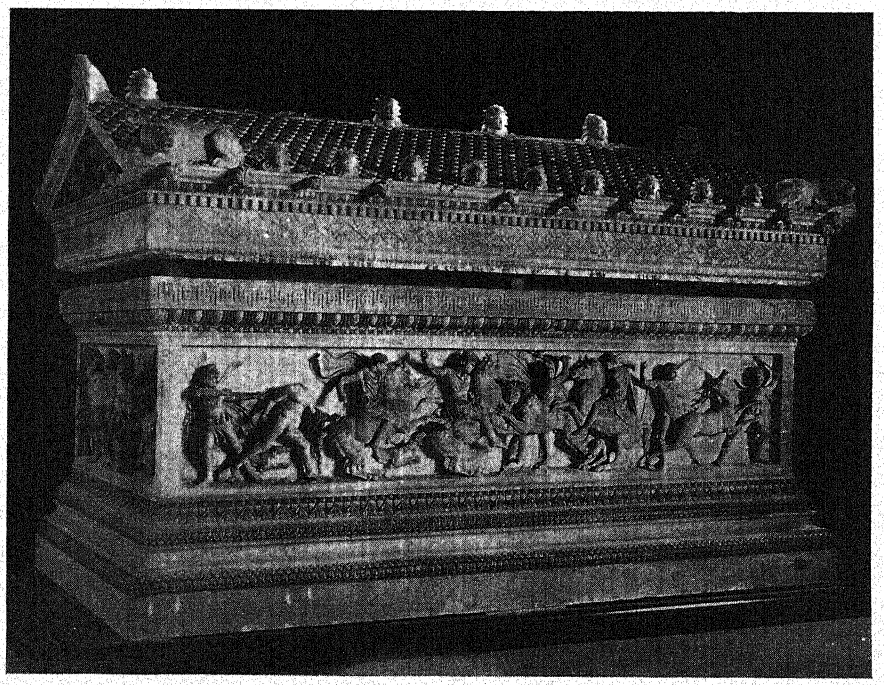
ing developed more rapidly than did their sculpture. This is indicated by the fact that while Polygnotus was still painting the great frescoes of Delphi, Athens and Plataea, his nephew, Aglaophon, had already become famous for his small genre pictures. These were painted on tablets which had received a thin coating of plaster; the technique was that of the frescoes, and the colors consisted of the four elementary hues employed by Polygnotus and his school.

There seems to have been much variety, both of subject and style. Many anecdotes have come down to us of the great painters of the generation succeeding Phidias; even their opinions on matters of art have been recorded in the dialogues of Socrates, who cultivated their friendship. Zeuxis and Parrhasius were the two great rivals of the time. Aristotle, who had seen the great progress made by Scopas and Lysippus, complains that while the figures painted by Zeuxis were beautiful, they were not sufficiently individual in character. The great Helena by Zeuxis, in Crotona, might be considered typical. It was no doubt an ikona, a female figure of surprising beauty, but it was entirely lacking in expression. A Cupid crowned with roses, and a number of compositions, such as a family of centaurs and the infant Hercules strangling the serpents, were also some of the noted pictures by Zeuxis.

Aristotle tells us that "the painting by Zeuxis is lacking in *ethos*." But very likely its greatest attraction lay in the fact that these is no attempt to moralize or preach, but only to produce a beautiful work of art. The story of how the



NECROPOLIS OF SIDON. Sarcophagus of the mourning women. *(Museum of Constantinople.)*



NECROPOLIS OF SIDON. The so-called Sarcophagus of Alexander. *(Museum of Constantinople.)*

Fig. 513. — Sacrifice of Iphigenia. *(Museum of Naples.)*

birds came to peck at the grapes in the picture shows that Zeuxis evidently aimed at the realistic effect attained by the still life painters of the Dutch Renaissance.

Parrhasius appears to be able to work with greater realism than did Zeuxis. He was fond of details and gave close attention to the expression and character of his subjects, which were shown by their movements as well as in their faces. This was as severely criticized as was the cold lack of expression which characterized the paintings of Zeuxis. His Theseus was thought to be altogether too delicate. They said that the oher looked "as if he had fed upon roses." On the other hand, the story was told that when he painted his Prometheus he tortured a slave in order to be able to study the effect of extreme pain. He was also famous for the manner in which he depicted the pretended madness of Ulysses, and his Philoctetes was like one of the actors of classical tragedy. His ideal seems to have been to express the most complex emotions of mankind. Such, according to Pliny, was his remarkable representation of the Demos of Athens; here a single person is tipical of the character of the Athenian populace, irritable, unjust and inconstant, and at the same time merciful, reasonable and charitable.

Timanthes was the third master of the Ionic school and was probably a native of the Island of Cythnus, although he later lived in Sicyon. In many respects he was even more admired than Parrhasius. He was successful in a competition with the latter which was held in Samos, the subject being the struggle of Ajax and Ulysses for the arms of Achilles. Timanthes' most famous painting, however, was the picture representing the sacrifice of Iphigenia. It was highly esteemed by the artistic world in ancient times for the manner in which it expressed the sorrow of those who took part in the tragedy. Agamemnon is veiled in order to hide his despair; Ulysses, Menelaus and Nestor display their

Fig. 514. — The sacrifice of Iphigenia by Timanthes. Mosaic in Emporion. SPAIN.

deep sorrow. Above, we see Diana with the doe which she supplied for the sacrifice in the place of Iphigenia, who was thus miraculously saved, according to Euripides' version of the legend. A mosaic from the Greek colony of Emporion (fig. 514) shows us the arrangement of most of the figures, but we are only able to identify the veiled Agamemnon by a Pompeiian fresco which portrays the same scene. The figure of Agamemnon is also represented in this scene in the reliefs on a number of sarcophagi.

Apelles, an Asiatic Greek painter, belonged to another generation. His fame was such that he was the only artist who was permitted to paint portraits of Alexander. His home was in Ephesus, where his most famous pictures were greatly admired, especially one of Venus rising from the waves. This occupied the same position in painting that the Cnidian Venus did in sculpture. No copies of this picture have been preserved, but there are a number of statues of a young Venus with sea-weed in her moist hair, which may be sculptural representations of the Venus of Apelles.

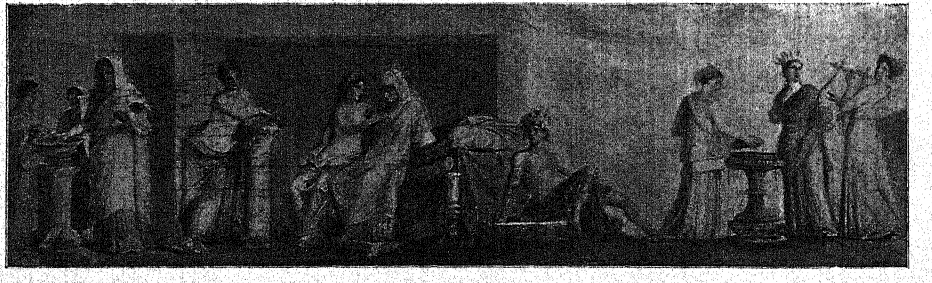


Fig. 515. — The Aldobrandini wedding. Fresco from Ostia. *(Vatican Library.)*

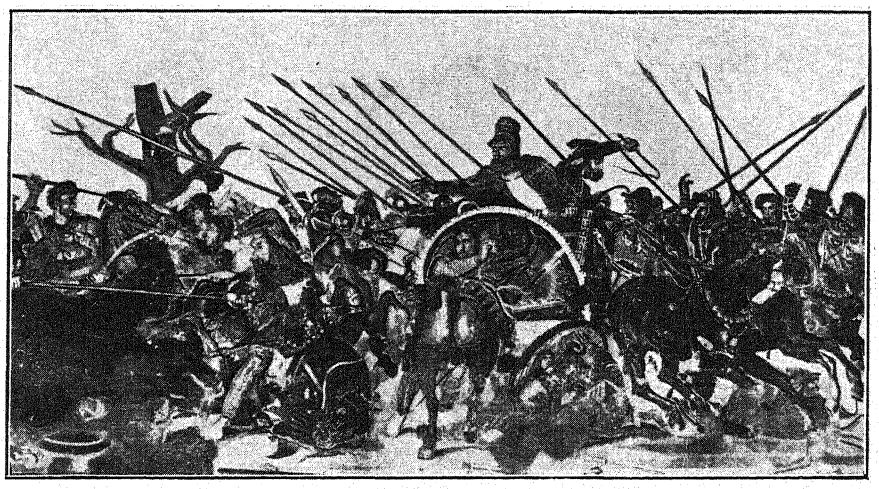


Fig. 516. — The Battle of Issus. Pompeiian mosaic. NAPLES.

There are written references to other paintings by Apelles in which Alexander is frankly deified and confers with the gods. The pictures of Apelles and his school immortalized the life and deeds of the great conqueror, and it is very probable that the mosaic found in a house in Pompeii, now in the Museum of Naples, represents the Battle of Issus. Here Alexander in person led a charge against the group of spearmen called the immortals, who formed the invincible royal guard of Darius (fig. 516). The Macedonian hero on his horse, his hair in characteristic disorder, assails the panic stricken Persian warriors and carries the battle right up to the chariot of Darius (fig. 517). The entire battle has been summed up ably in this episode and we see in this single scene the glory of Alexander and the victory of the Greeks. A tree trunk which seems rather out of place is the only bit of local color. Although there is an entire lack of perspective in the picture, the spears, which are pointed at the Macedonian, slant at various angles, suggesting that they are at different distances from the spectator.

Fig. 517. — Head of Alexander. Mosaic in the Museum of Naples.

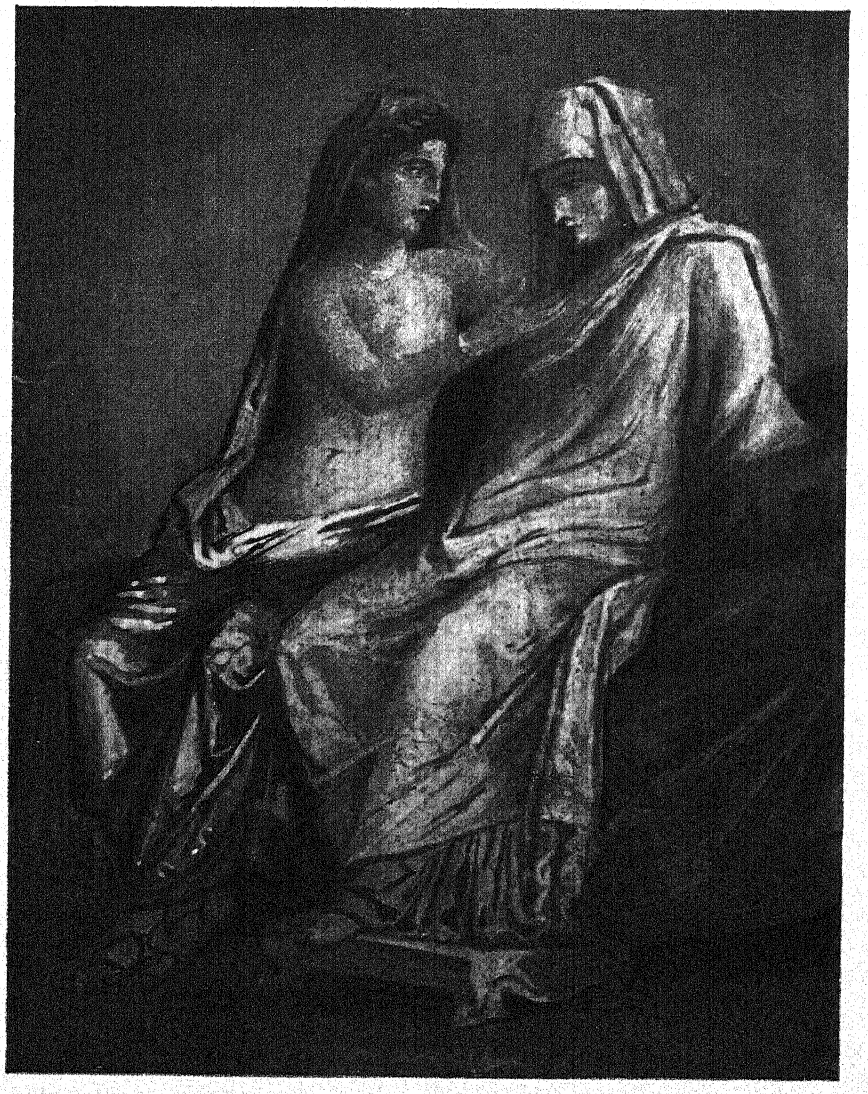
We do not know who painted this picture, although it was very popular and widely copied, but the name of another painter of the same period has come down to us. This was Aëtion, who painted the famous picture of the marriage of Alexander and the princess Roxana. Lucian gives us a detailed description of this painting, in which he praises the composition highly. He de-

Fig. 518. — Mother and family. *Villa Item.* POMPEII.

scribes Alexander and his bride and the little Cupids who toy with the weapons of the conqueror.

It is not unlikely that the fresco from Ostia, formerly in the Aldobrandini collection and now in the Vatican, is either a copy or an imitation of this picture by Aëtion (fig. 515). It is a small copy, for the figures are much smaller than life-size and all are in the same plane, so we know that it dates at least from the beginning of the third century B.C. We see standing out in the centre the charming group of the pale bride, who is still veiled, and who receives the last counsels from another woman, probably Venus. (Plate XLII.) The bridegroom is crowned with flowers and waits impatiently beside the nuptial couch, while on either side are groups of women singing the wedding hymns and preparing the perfumes.

A few years ago, a large composition was discovered in an ancient Roman



Aldobrandini wedding (fragment). Group of Venus and the wife. *(Vatican Museum.)*

Fig. 519. — Initiation into the Mysteries. *Villa Item.* POMPEII.

villa near the present Villa Item, just outside Pompeii. From its style it is evident that this is the copy of a late fourth century or early third century original. The frescoes of which it is composed, are the freshest of any antique paintings yet discovered and are the only large ones containing many life-size figures. We know the date of the copy, because the work on the villa was interrupted by the volcanic eruption which destroyed Pompeii. The originals, however, were Greek and much older. They were copied in this Pompeiian country home, just as we decorate our houses today with copies of pictures dating from the Italian Renaissance. The subjects of these pictures are extraordinarily interesting. On one side, the scene is laid in the gyneceum, or women's quarters of a Greek house, where a mother is receiving visitors and also teaching her little son to read (fig. 518), Beside it is a large panel representing an initiation into the

mysteries. Nude maidens in the frenzy of a bacchanalian rite are madly dancing, pursued by black winged figures. One of the maidens leans exhausted upon the knees of a companion, who apparently tries to revive her (fig. 519).

Summary. — Characteristic of the architecture of the fourth century was the circular structure at Epidaurus. Athens continued to enjoy preeminence in art owing to her good taste and most of all, because of the Athenian school of sculptors. We are familiar with the Venus by Alcamenes who was one of the pupils of Phidias. There was also a famous family of sculptors, the first of whom was a certain Praxiteles, the contemporary of Phidias. The next generation of this family was represented by Chephisodotus who carved the group of Eirene and Plutus. Cephisodotus' son was the great Praxiteles, the most famous sculptor of Athens. We are familiar with a number of Cupids which may be ascribed to the master himself. He also carved the Satyr and the Cnidian Venus, the latter a nude figure. The excavations of the archaeologist have yielded three authentic marbles by Praxiteles: the group of Mercury and Bacchus at Olympia, the base at Mantinea, and the Euboleus at Eleusis. The art of Praxiteles was also the source of the types of funeral statues, idealized feminine portraits. The partly clothed Venus with a mantle draped about the legs is a type wich we must ascribe to another master, Scopas. He is known to have carved the statue of Meleager and a number of heads found in the ruins of the temple of Minerva Alea. Scopas also worked on the Mausoleum together with Bryaxis and Leochares. Coming to the pupils of Praxiteles, it is very possible that the Apollo Belvedere is the work of Euphranor. Another pupil of Praxiteles was his own son Cephisodotus, named after his grandfather. According to some authorities he carved the *fanciulla* of Anzio. A third great master ranking with Praxiteles and Scopas was the Dorian Lysippus, the famous sculptor of the portrait-statues of Alexander. His favorite subject was Hercules, whom we find represented in a number of works, and we may also, perhaps, ascribe to him the original of the seated figure of Mars in the Ludovisi Collection. The original of the Apoxyomenus is to be ascribed to Lysippus unquestionably, and the statue of Agias found at Delphi is the marble copy of a work of the same master. In the field of painting we find a generation of great masters represented by Zeuxis and Parrhasius. A pupil of the latter, Timanthes was famous for his picture of the sacrifice of Iphigenia. Apelles was the painter of Alexander, and to his school may be ascribed the original of the pictures of the battle of Issus and of the marriage of Roxana. An echo of the latter is the fresco of the Aldobrandini collection. To the same period belonged the originals of the frescoes discovered in the Villa Item near Pompeii.

Bibliography. — W. Klein: *Praxiteles,* 1898. — M. Collignon: *Scopas et Praxiteles,* 1907. — J. J. Bernouilli: *Alexander, der Grosse,* 1905. — K. B. Stark: *Niobe und die Niobiden,* 1863. — E. A. Gardner: *A Hanbook of Greek sculpture,* 1896. — W. Amelong: *Die Skulpturen des Vatikanischen Museums,* 1908. — A. Furtwaengler: *Master-pieces of Greek sculpture,* 1895. — P. Kabbadias: *Fouilles d'Epidauros,* 1891. — W. Klein: *Praxitelische Studien,* 1899. — A. Conze: *Die attische Grabreliefs,* 1893. — W. Helbig: *Untersuchungen über die kampanische Wandmalerei,* 1873. — Bruckmann: *Denkmäler der Malerei des Alterthums,* 1910. — Di Pietra: *Scavi nella villa Item,* 1912. — B. Nogara: *Le nozze Aldobrandini,* 1907. — F. Winter: *Das Alexandermosaik aus Pompeii,* 1904.

Fig. 520. — Decadrachm of Syracuse.

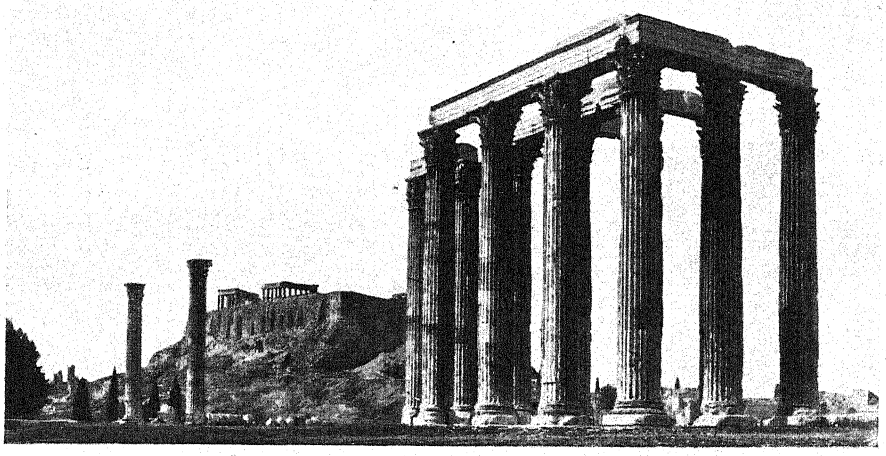


Fig. 521. — Temple of Olympian Jupiter at Athens.

CHAPTER XVI

THE HELLENISTIC PERIOD.— ARCHITECTURE.
PUBLIC BUILDINGS.— THE GREAT CAPITALS.— SCULPTURE. NEW TYPES.
PORTRAIT STATUES.— THE LOCAL SCHOOLS. ALEXANDRIA, PERGAMUM, RHODES.
PAINTING AND CERAMICS.— GOLD WORK AND GEMS.

GREEK art seemed destined to fall into vulgarity and mannerism after the death of Alexander, and its development during the next two centuries is indeed surprising. We see in this period, more than ever before, the remarkable aptitude of the Greek people for art. They had lost both their political liberty and their faith in the old gods, and the subject matter of their art had become more sensual, but in spite of the nature of its content, the artists dignified the ugliest and most trivial subjects by the esthetic manner in which they represented them. It was a period of luxury, and it is generally considered that the refinement accompanying decadence is favorable to art.

Fig. 522. — Triangular capital from Eleusis.

The Greek world became much larger as the result of the conquests of Alexander. The peoples of Asia

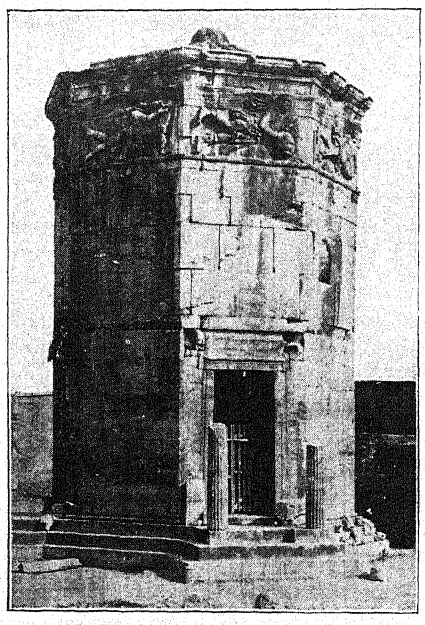


Fig. 523. — Tower of the Winds. ATHENS.

and Egypt had received Hellenism with a certain amount of hesitation up to this time, but a taste for Greek art once acquired, they renewed its styles with youthful enthusiasm. Greece was reborn in the lands of its adoption, and Alexandria, Pergamum, Antioch and Ephesus now became the new art centres. Each contributed its own note; the variety displayed in the Greek art of these centuries is explained by the diversity of the peoples who assimilated it. The entire period has been called the Alexandrian because it was in the new African capital that the art and culture of the Greeks was believed to have reached its highest development. Today, however, to do justice to the cities of Asia which contributed as much or more than Alexandria to this latest advancement of Greek art, the term Hellenistic is used in preference as it is more general. We therefore designate both the period and the art following the death of Alexander by the name, Hellenistic, to distinguish them from those of the preceding centuries which were Hellenic, or purely Greek.

We find this Hellenistic art existing in Egypt, especially at Alexandria; in Asia, as at Pergamum, Rhodes and Antioch; in Italy, where it exercised a strong influence upon Roman art; and even in Greece itself. Athens could hardly remain aloof from this great movement, when it was the favorite city of the monarchs who succeeded Alexander. They sent their treasures to Athens from Asia; indeed, it is very significant that the veil of the temple of Jerusalem was carried to the shrine of Minerva Parthenos. Antiochus Epiphanes, king of Syria, took up the construction of the Olympieum, the temple of Olympian Jupiter at Athens which had been begun in the sixth century B.C. before the Persian War (fig. 521). The great structure was left unfinished however, and its gigantic Corinthian columns filled the traveller of the Roman period with the same awe which we feel today. Vitruvius cites it as an example of the hypethral or roofless temples in which a double colonnade enclosed an open cella which was really a court. Hadrian afterward continued its construction and left it in the form represented by the existing ruins, so the great temple was never completed. We see other evidences of the prestige still maintained by Athens in the ex votos which Attalus, king of Pergamum, set up on the Acropolis, of which we will treat later, and the propylaea of the sacred enclosure at Eleusis, which were constructed by the Roman Appius Claudius. In the remains of the latter have been found some very beautiful triangular capitals, ornamented with griffins and curled acanthus leaves (fig. 522). The small octagonal building at Athens, called

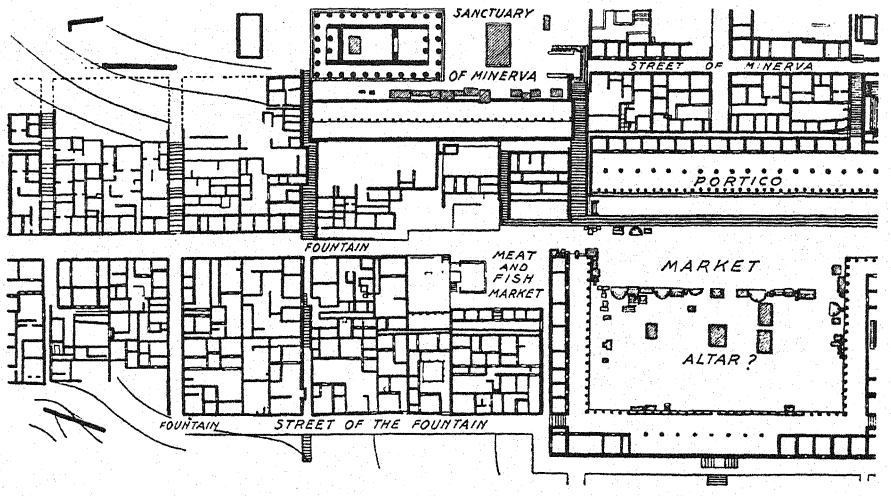


Fig. 524. — Plan of Priene. The market quarter.

the Tower of the Winds, also dates from the same period (fig. 523). It was evidently a water-clock ornamenting the centre of a market place, for one of the paintings of Pompeii shows a similar structure set in the middle of a square surrounded by a colonnade, apparently the market of the meat vendors. The porticos or buildings surrounding the Tower of the Winds at Athens have long since disappeared. The graceful little building takes its name from the reliefs on its eight sides, each of which represents one of the winds, and the whole forms a sort of frieze extending around the upper part of the tower.

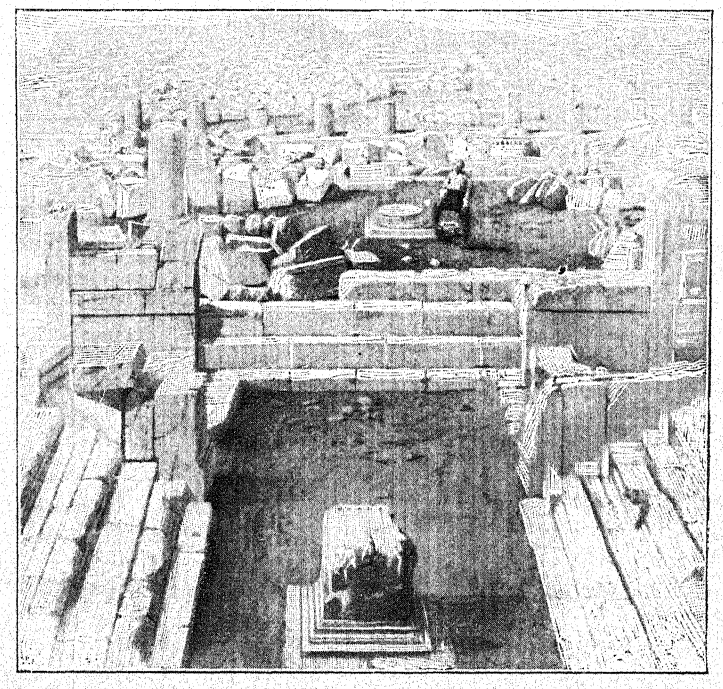


Fig. 525. — View of the excavations at Priene.

Not only in Athens and the surrounding

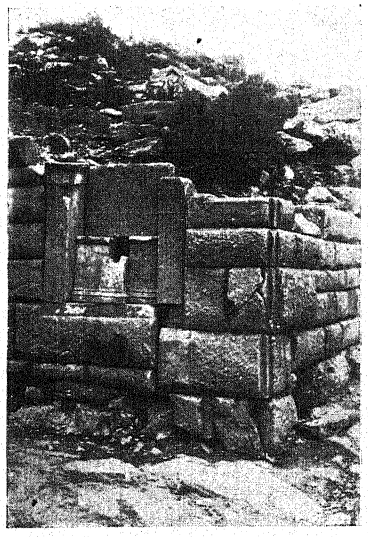
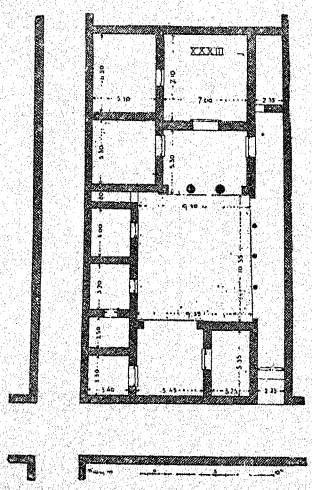


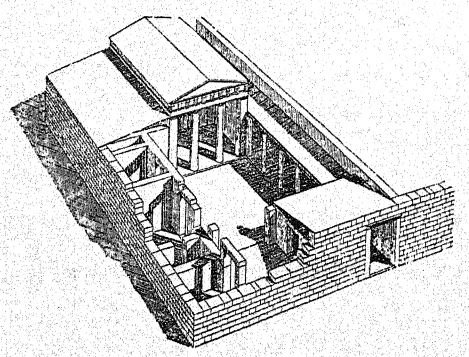
Fig. 526. — A street fountain. PRIENE.

country, but throughout all Greece, great patrons erected magnificent monumental structures during this period. The sanctuary of Olympia, for example, must have been changed greatly in appearance by the erection of the circular building called the Philipeum and the Portico of Echo with its statues of the generals of Alexander. Later, in the Roman period, the Exedra of Herodes Atticus and other structures built by the emperors were added. The ancient sanctuary of the Island of Delos benefited to a still greater extent by this religious enthusiasm. From the excavations made by the French archaeologists of the School at Athens, we see what sort of cities grew up around the famous sanctuaries during this period. The population of Delos was most cosmopolitan, for there was a quarter for the Italians and another for the Levantines. The city was laid out to follow the contour of the ground and, in a general way, its streets and squares were planned according to the rules laid down by the Ionian architect, Hippodamus of Miletus.

One remarkable building was the so-called Portico of the Bulls, a large hall the roof of which was supported by pillars with brackets in the form of kneeling bulls. This capital or bracket ornamented with animal forms was often used in Roman times; indeed we shall see that many of the architectural types afterward imitated at Rome were created during the Hellenistic period. These flourishing cities which grew up about such sanctuaries as Delos and Olympia required municipal buildings, and the Portico of the Bulls seems to have been used for festivals and assemblies.

Priene, one of the famous Hellenistic cities





Figs. 527 and 528. — Plan and reconstruction of a Greek house. *(Wiegand.)*

of Asia, was even more regularly laid out in city blocks and squares. It was excavated (1895-1899) under the auspices of the Museum of Berlin, and its ruins were found in such an excellent state of preservation that it may be taken as a good type of a Hellenistic city of second rank (figs. 524 and 525). The city was set upon the spur of a rocky mountain overlooking the valley of the Meander River. From the terraces formed by its streets, the river may be seen winding across the plain until it loses itself in the sea. Notwithstanding the sharp pitch of the ground, the streets intersect one another at right angles. There are six horizontal streets and sixteen others running up and down the steep slope, so it was necessary to build stairways to make the ascent. At the street corners, they placed marble benches and public fountains with an opening for the purpose of filling pitchers from the water collected inside (fig. 526).

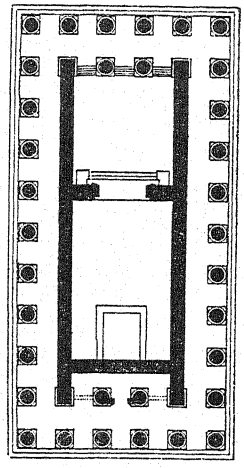


Fig. 529.—Plan of the temple of Priene.

The houses had as few doors opening into the street as possible. If the house was on two streets, the entrance opened into the smaller of the two, so that it might be concealed from those who passed along the main thoroughfare. A lateral corridor led from the entrance to a rectangular court into which all the rooms opened. At the rear of the court was the *triclinium,* or principal room of the house, which was ornamented more than the others and served both as a dining and reception hall (figs. 527 and 528).

The Greek dwellings of both Delos and Priene were very similarly arranged; all had a central court, which varied in size, in which respect they differed from the early Roman houses. The latter had a covered hall in the centre instead of a court. This hall, which was called the *atrium,* was lighted from an opening in the ceiling which let in the rain as well; this was collected in a small central cistern. The two types of houses are derived from very different sources. The Greek house originated in the pre-Hellenic dwelling which had both court and *megaron,* the latter becoming the *triclinium.* The Roman home had its beginning in the primitive Latin hut constructed of logs and branches, with an opening in the centre of the roof to let out the smoke. This Roman type of house was not used after the end of the Republic; in the first century A.D. it became fashionable to imitate everthing Greek, and the central court was introduced into Roman dwell-

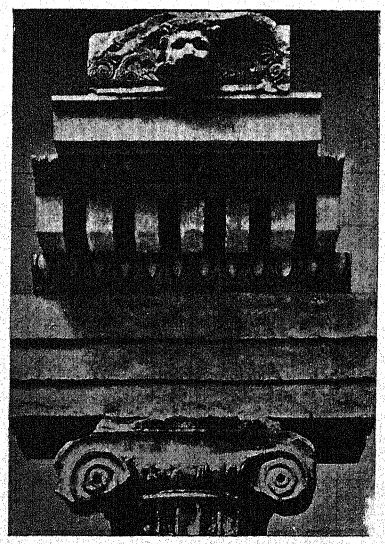


Fig. 530. — Entablature of the temple of Priene.

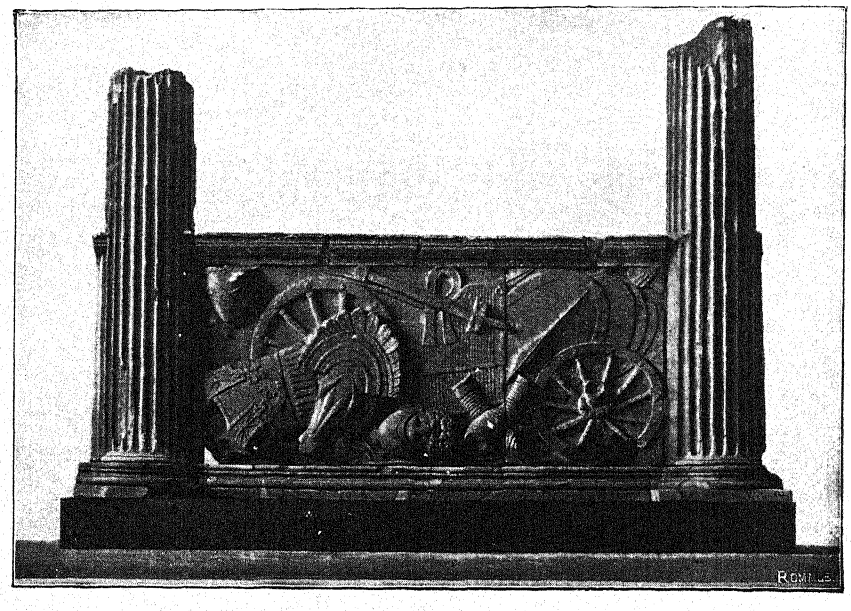


Fig. 531. — Balcony of the upper floor of the basilica of Pergamum.

ings, so most of those of Pompeii and Imperial Rome were true Greek houses and their remains may be studied in comparison with those of Delos and Priene. Some of the houses of Pompeii were more than one story high and such houses must have also existed in the great Hellenistic cities like Alexandria and Antioch. Those of Delos and Priene are probably typical of the less populous cities where there was more room to build.

The temple of Priene, constructed by Alexander, was in the highest part of the city. It was built of marble and is of especial interest for its architect was Pythis who superintended the erection of the Mausoleum of Halicarnassus and was mentioned by Pliny as one of the greatest Ionian architects (figs. 529-530).

High up in another corner of Priene was the theatre; below it overlooking the market place with its shops was the great portico, or hiera stoa, which was a covered passage way. These porticos are characteristic of the semi-independent cities of the Orient to which Alexander and his successors had conceded many privileges. The wealthy citizens of intellectual tastes gathered for discussion under these porticos, which were rather a shelter from the sun than from the rain in that climate. Sometimes they had two stories like the one surrounding the square at Pergamum; in this case it was called a basilica, or place of contracts. The balcony of the upper floor was decorated with relief carvings of military trophies which the artists of the Roman Empire

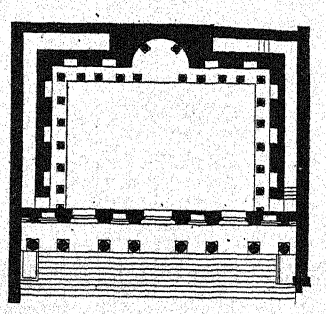


Fig. 532. — Plan of the Library of Ephesus.

imitated with great success (figure 531). On the north side of the square of Pergamum was the famous library of ten thousand volumes which were set in niches around a large rectangular hall.

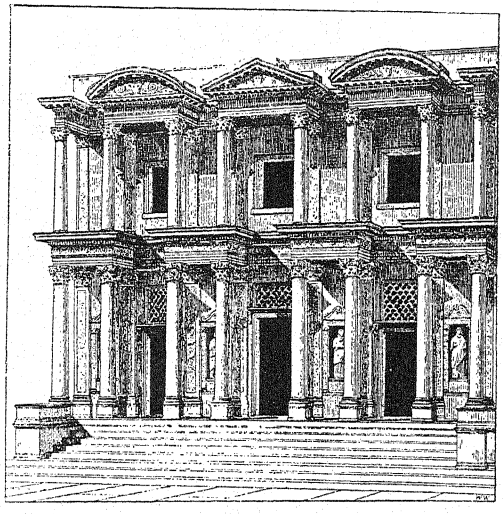


Fig. 533.—Restoration of the façade of the Library of Ephesus. *(Niemann.)*

During the Hellenistic period the municipal library often had a special building to house it; that of Ephesus, which was excavated by the Austrians, had a rich façade in which a row of three windows surmounted its three doors (figs. 532 and 533). The manuscripts were kept in rectangular niches set into the wall spaces between the columns. At the back of the hall was a greater niche in which a large statue was set which was either a representation of the city itself or the apotheosis of the monarch who had erected the building. The library of Ephesus was imitated in Roman times; recent excavations of the Baths of Caracalla at Rome have laid bare two portions of the building adjoining the palaestra, which are evidently libraries. Here we see the same arrangement of niches and columns as were found in the library of Ephesus.

The intellectual life of the Hellenistic city also found expression in a building called the gymnasium, which was dedicated to the education of youth and performed the same service as our own secondary schools. The site of the gymnasium of Soluntum was rather restricted and the various parts of the structure were set around a sort of cloister of two stories. The lower of these was Doric, and the upper, Ionic. It was not very large, as Soluntum was but a small city (fig. 534). We may take that of Syracuse as an excellent example of a typical Greek gymnasium. There were

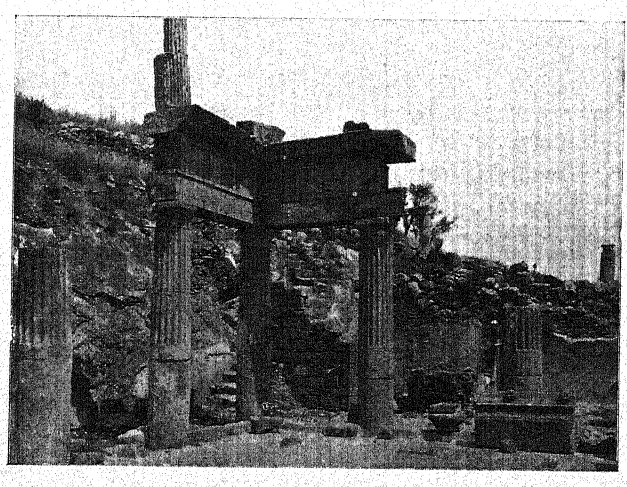


Fig. 534.—Gymnasium at Soluntum.

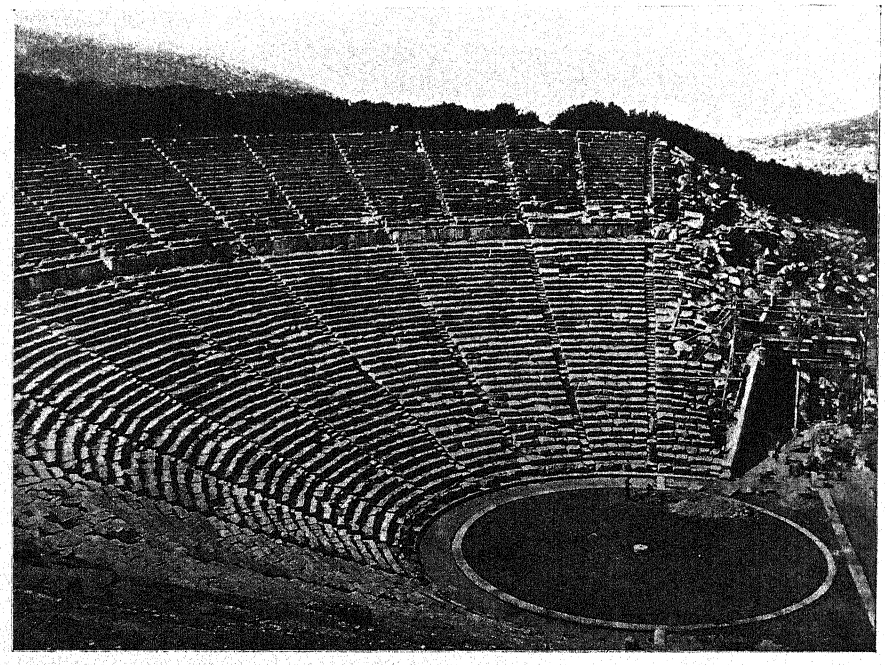


Fig. 535. — Greek theatre. EPIDAURUS.

semicircular tiers of seats for those who attended the courses and lectures in front of a small temple, behind which was the palaestra used for athletic exercises. Around the palaestra ran a portico where people promenaded and conversed, and where the library was probably located.

One almost indispensable feature of a Hellenistic city was the *Beleuterium*, where the municipal council met. The autonomy enjoyed by many Asiatic cities made such a building necessary, and here the deliberations of the little senate took place. The only one of which we have any accurate knowledge is that of Miletus, which was also excavated by the Museum of Berlin. The entrance led through a portico, not unlike a propylaeum with its façade of four columns, into a rectangular court where there was another portico as well. In the centre was an altar, or perhaps the tomb of a distinguished citizen, and at the rear of the court were located the council hall and the city offices.

In some cities the municipal council met in the theatre as at Priene. The Hellenistic cities always had a theatre, even the little frontier cities out on the desert, but it differed from the older Hellenic Greek theatre in two respects: it was larger and the stage was more richly ornamented. More actors were now employed and a stage was required large enough to put on great pageants, so these stages embellished with columns began to assume monumental proportions. The decoration of the stage grew more and more ornate until in Roman times it passed entirely beyond the limits of good taste. At each side of the stage was the double door through which actors and chorus entered. In the

theatre of Epidaurus, there was a circular dancing place or orchestra for the chorus, as described by Vitruvius. The line of the stage formed a tangent to the circle described by the lower tiers of seats (fig. 535).

The auditorium was out of all proportion to the size of these Hellenistic cities. It was the great ostentation period; the minor cities vied with one another in the construction of enormous theatres with a seating capacity for thousands of spectators. At Athens, the theatre of Dionysus was rebuilt with a costliness unequalled by any of the other Greek theatres (fig. 536). The base of the stage was ornamented with sculptures in high relief and the marble seats for the magistrates and city officials were magnificent (fig. 537). The greatest theatre in the Greek colonies was in Syracuse; the ruins of its galleries, orchestra and stage are still to be seen. The greatest theatre in Greece, according to Pausanias, was that of the sanctuary of Asclepius at Epidaurus (fig. 535).

Very different from the theatre was the Odeum, which was constructed for musical performances. The Odeum of Athens was erected by Pericles and rebuilt by Herodes Atticus; the ruins of its tiers of seats and of the proscenium wall are still to be seen at the foot of the Acropolis (fig. 538). It was originally covered with a wooden roof.

To complete our description of the Hellenistic city, it is necessary to mention the tombs, although the greatest eclecticism prevailed in this matter. Every part of this new and cosmopolitan Greek world continued to practice its own ancient method of burial. At Athens interments were still made at the Ceramicus and the traditional funeral stelae were set above the sepulchres, but the sculptures ornamenting them became more and more trivial and lacking in interest. At times the old subjects, such as the last leave-taking of the deceased, appear in small reliefs ornamented with a profusion of acanthus leaves (fig. 540); again, we see only purely decorative designs, like those on the beautiful vases that are supposed to be funeral urns (fig. 539). In Asia monumental tombs of the type of the Mausoleum are repeated in simpler forms with a rectangular or circular base; even in far-off Sicily the same style was followed, as in the so-called tomb

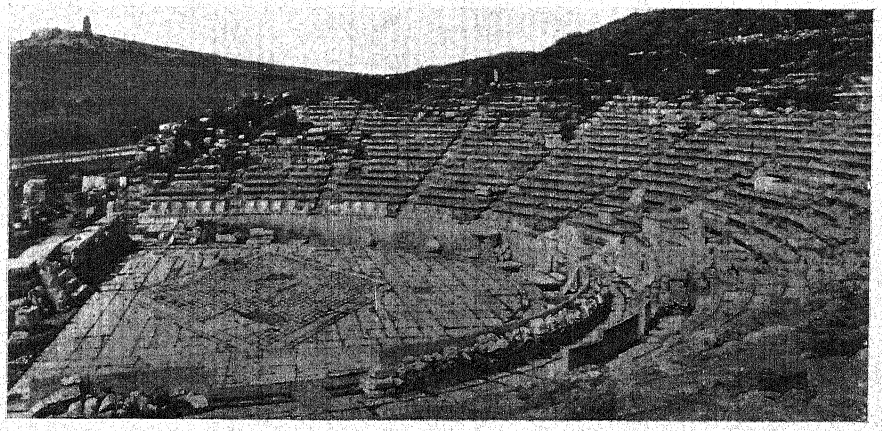


Fig. 536. — Theatre of Dionysus at Athens.

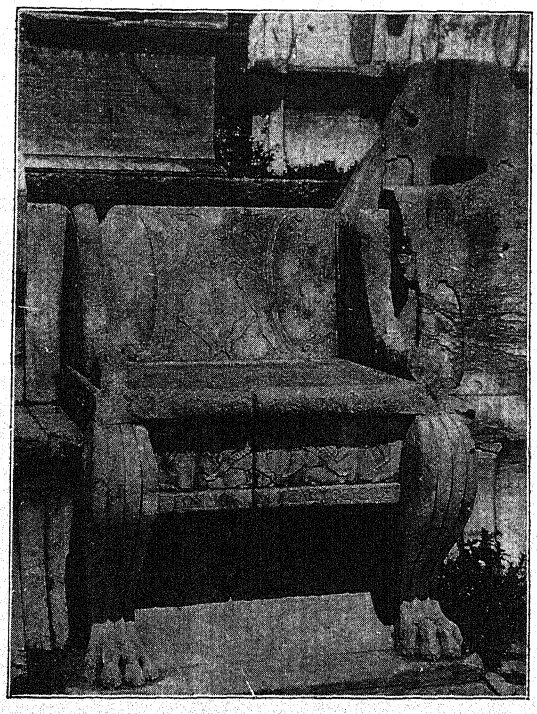


Fig. 537. — Marble seat in the theatre at Athens.

of Theron at Agrigentum. This is a plain tower built in the form of a truncated pyramid, for its walls slope toward the centre, and there is a false door in its upper story. The door on the ground floor shown in our reproduction is modern. The Romans imitated both this tower shaped tomb and the Oriental sarcophagi. Many Hellenistic sarcophagi are found in the Asiatic cities, and there was quite a traffic in the sarcophagi from Asia at Rome.

Our discussion of the temples has been purposely left until the last, for it is in religious buildings that we usually find old established traditions most scrupulously observed. But in this era of architectural innovations, even these shared in the universal change which took place. The philosophical, almost pantheistic, character of the religion of this period, as well as the actual worship of the gods, gave rise to a taste for great, richly decorated altars, a fitting finishing touch to a temple which was already a recklessly expensive tribute to the deity. The older altars rather recall the old Mycenaean altar set in the court in front of the megaron, but we now see altars of colossal size set out by themselves with enormous bases, which were often ornamented with relief sculptures. Such an altar was a magnificent

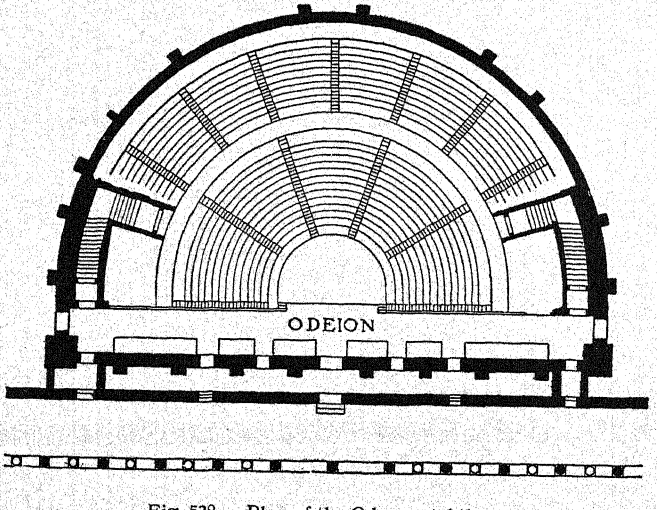


Fig. 538. — Plan of the Odeum at Athens.

demonstration of the reverence of its builder for the new enlarged conception of Jupiter, father of heaven and earth. In our consideration of the art of Pergamum we shall describe the great altar at that city, which was embellished with relief carvings of the battle of the gods and giants. We should also mention the great altars of Magnesia as well as others at Syracuse and Paestum, the imposing remains of which are still to be seen. All of these date from the Hellenistic period.

Temples were also required for the local deities of these Hellenistic cities; these followed the old classical models. We see, however, a tendency to turn to the types of Asiatic Greece, as in the Olympieum at Athens and the temple of Apollo Didymaeus at Miletus. The latter was a colossal hypethral structure with a large central court and three rows of columns on its façade (fig. 542). The temple of Apollo at Miletus, that of Juno in Samos, and the temple of Diana at Ephesus, the three great monuments of Ionia, were all octastyle. The exploration of the temple at Miletus was most difficult as its site had become a pond, but the plan could be traced and three columns still standing give us some idea of its construction. Inside the court were pilasters with Ionian capitals of stucco.

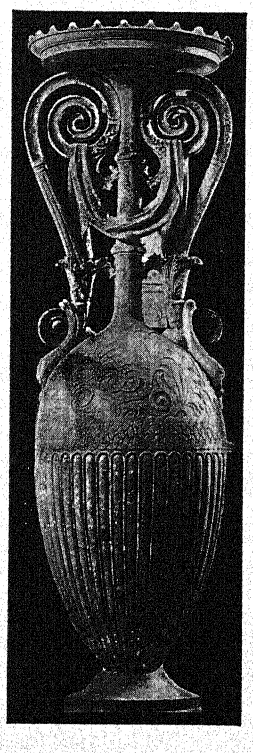


Fig. 539.—Funeral urn. ATHENS.

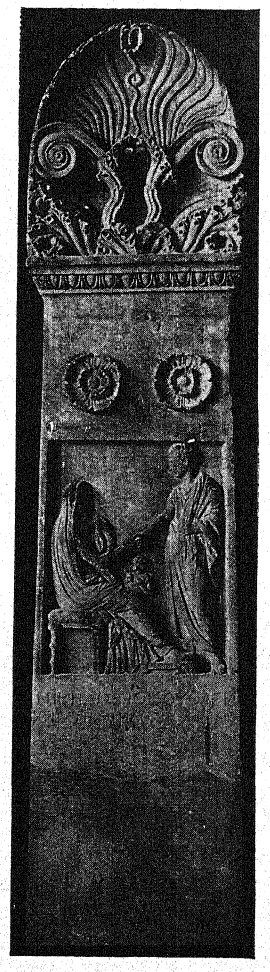


Fig. 540.—Funeral stela. ATHENS.

These new ideas and architectural principles were evolved in both Egypt and Asia, but especially in the Asiatic Greek cities. The study of the development of the classical styles in the Orient is, therefore, most important to us.

The Doric order had been adopted in Asia to a certain extent, but it was always coldly interpreted. Instead of the curved moulding called the echinus, the Doric capital was surmounted by a square section and the columns, which had always been comparatively short and close together, were made more slender and were more widely spaced. The Ionic order also underwent a change in Asia, acquiring new characteristics which the Roman imitators have made very familiar to us. The column was set upon a higher plinth, more

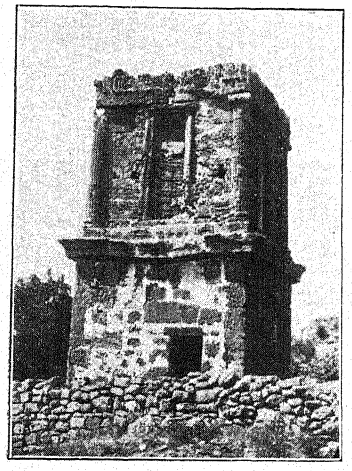


Fig. 541.— Tomb of Theron.
AGRIGENTUM.

mouldings were added to the base, and, most important of all, the capital, while preserving its volutes, lost its egg-and-tongue pattern and was decorated with the honeysuckle pattern, acanthus leaves and rosettes (fig. 543).

The temple of Jupiter, or Olympieum, at Athens is the most typical example of the Corinthian order of this period, although the architect Hermogenes, who was the author of a treatise followed by Vitruvius, opposed the Corinthian capital. The building craze of the Asiatic cities is also shown by the popularity of the architectural treatises of the time which laid down rules and precepts for construction. The most famous of these was that of Hermogenes; its wide circulation, which included Italy, sheds much light on the origins of Roman art. From this time forward, the Ionian cities began to supply the distant Occident with both architects and ideas regarding architecture. Hermogenes represents the beginning of the introduction of oriental Greek influence into Rome and Byzantium. He was the precursor of Apollodorus of Damascus who built the Forum of Trajan, and of the two architects of Sancta Sophia, who were also from Asia. Some of the temples of Republican Rome were of the Ionic order, for the Hellenistic architects in Latium seem to have followed the precepts of Hermogenes. As the writings of Hermogenes are now lost, there has been a desire to discover some of the buildings which he constructed. Great hopes were aroused at the time of the exploration of the temple of Diana at Magnesia, which was reputed to be his work. We see in this many innovations which were not in the best of taste. This is especially true of the windows set in the pediments instead of sculptures. The temple is octastyle, and the central columns are more widely separated than elsewhere. The *cella* is small, but the vestibule, or *pronaos*, is unusually large and is separated from the portico by means of columns which are incorporated in the wall up to a certain height, as was the custom in Egypt. This was also a feature of the temple of Priene. Hermogenes collected in his books the results of all the experience of ancient times, and he desired to combine all this in a harmonious manner in his own buildings. The same is true of Vitruvius who found it necessary to describe in detail his

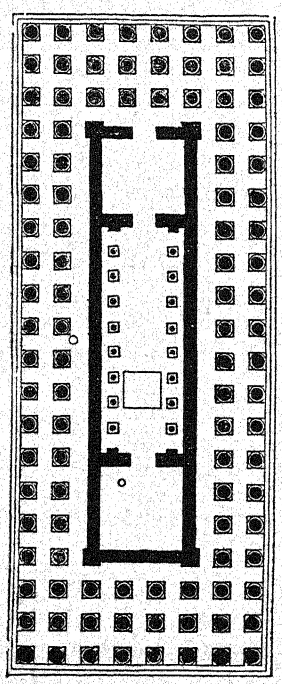


Fig. 542.— Plan of the temple of Miletus.

basilica at Phano, so greatly did it differ from the traditional type.

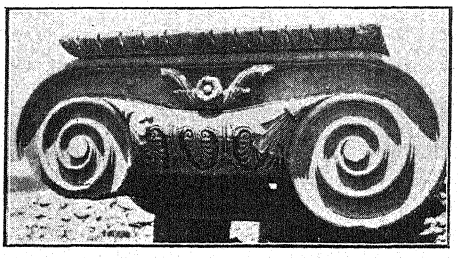


Fig. 543. — Capital from the temple of Sardis.

This tendency of the Hellenistic architects to depart from established precedents is also shown in the temple of Minerva at Priene already mentioned. Here Pythis, who directed the work, left the frieze out of the Ionic entablature; in other words, he capriciously set the cornice directly upon the architrave (fig. 530). Unfortunately we are obliged to rely too much upon the data obtained from the cities of second rank for our study of this period. We know nothing of the great capitals of the kingdoms founded by the generals of Alexander, and these were naturally the great centres of artistic production. Seleucia, for example, located at the confluence of the Tigris and Euphrates where Orient met Occident, must have been a very favorable situation for the creation of new types. A conclusion of this sort may be drawn from the important part played by Antioch, the capital of Syria, which was still considered the third city of the world in Roman times, ranking next after Rome and Alexandria. There seems to be no doubt that a great school grew up in this part of the world which was later to exert a powerful influence on the beginnings of Byzantine art. We have no positive knowledge of its palaces and other great buildings. Still more to be regretted is our ignorance concerning Alexandria, the most modern city of its time and the seat of a court noted for its culture and refinement. Indeed, it must have resembled a present day European capital; it was famous for its mysticism and scientific interest and was an important art centre as well.

The descriptions by the ancient writers tell us little of the famous library, the museum, or the royal palace. The last named occupied almost a third of the area of the city and in it were held the sumptuous feasts described by Theocritus. The soil of the Nile delta is unfavorable to the preservation of important remains, and important excavations are impossible because the modern city

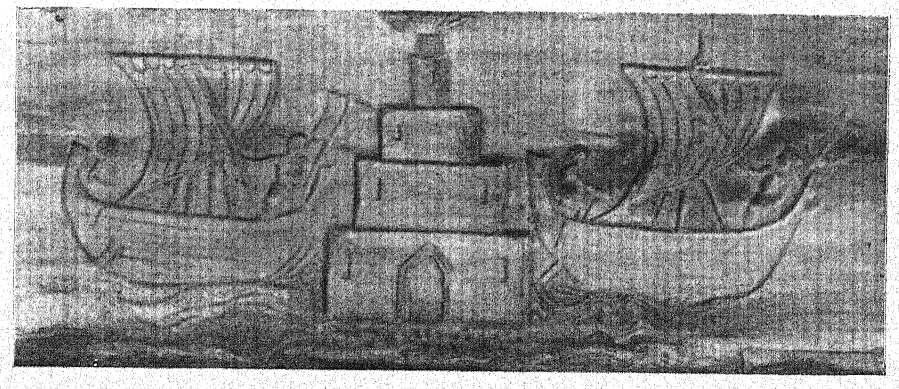


Fig. 544. — The Pharos of Alexandria. Relief in the cathedral of Pisa.

occupies the site of the ancient capital. Only through coins and relief carvings has it been possible to make a restoration of the famous Pharos, or lighthouse, which was one of the Seven Wonders of the world (fig. 544).

Pergamum is the only capital of which we have accurate knowledge. It was the chief city of one of the smallest of the Macedonian states in Asia. This city was explored under the direction of the Museum of Berlin and has furnished important data on the architecture and sculpture of the period. Compared with Alexandria and Antioch it was only a small provincial capital. Its houses lay on the slopes of a steep hill, on the terraces of which were the various public buildings and monuments, such as the theatre, the basilica, the library, temples and the great altar. On the summit of the hill were the two royal palaces. The smaller of the two was the older, but both were of the same type. The plans of these Pergamene palaces do not differ greatly from those of the private dwellings; only the court, which was surrounded with a colonnade, was larger. About the court, like a mediaeval monastery, lay the various apartments of the building. Although these palaces give us little idea of the great royal residences of Antioch and Alexandria, it is important to note that even in this latest period of Greek culture they still preserve the arrangement of the palaces of Tiryns and Crete. There is a court, and the *triclinium* took the place of the old megaron as an assembly hall and dining-room. It is not unlikely, however, that further to the east, as in Seleucia, the Hellenistic palaces bore a closer resemblance to those of the Assyrian and Persian monarchs.

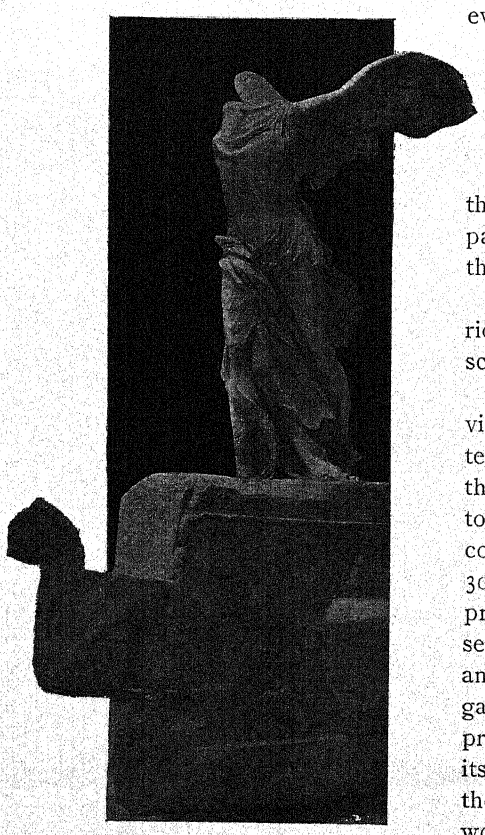


Fig. 545. — The Victory of Samothrace. *(Louvre.)*

The evolution of Greek art during this period can be followed more closely in the field of sculpture than in that of architecture.

The old types themselves become more vivid and personal in their character. A characteristic example is the marvelous statue called the Victory of Samothrace, which is supposed to have been carved for Demetrius of Syria in commemoration of his victory over Ptolemy in 306 B.C. (fig. 545). The goddess, set upon the prow of a ship, raises in one hand the trophy seized from the enemy. Her body leans forward and defies the contrary wind which whips her garment into quivering folds. Who would have prophesied that such a statue, so beautiful in all its details, flying through the air and speeding the trireme of the king of Syria on to victory, would be the descendant of that first Victory of Archermus, which was compelled to kneel upon the ground in order to seem to fly? Thus

did the inspired art of the Ionian sculptors modify the old traditional types. Nevertheless, Athens, the ancient art centre, still survived and reproduced many of the great works of an earlier day which have come down to us. It was here that the great industry of making copies of great statues grew up at this time. Mention has already been made of a ship from Athens found under the sea near Madhia in Tunis. Its cargo is convincing proof that the reproductions by the sculptors of Athens were the most highly prized in the ancient world. Many of the copies of this period were very free and even attain a certain originality of their own as in the case of the Venus de Medici, which was a reproduction of the Venus of Praxiteles. It varied from its model, however, in that instead of being represented as coming from the bath with jar and mantle, she is supposed to have risen from the waves to account for her lack of drapery and is accompanied by a Cupid and a dolphin. (Plate XLIII.) Many of the statues of this period become more and more sensual, but one more pleasing type is that of the goddess resting one knee upon the ground, while the other leg is doubled up (fig. 546). This is thought to be the work of Daedalus of Bithynia, the *Venerem se lavantem* mentioned by Pliny. The Oriental tastes of Alexandria and western Asia are plainly shown by a preference for a plumper Venus with more rounded contours (fig. 547).

Fig. 546. — The crouching Venus. *(Vatican.)*

The erotic tendency of the time even went so far as a love for the abnormal, as witnessed by the numerous statues of the hermaphrodite. In Pergamum a group executed by the son of Praxiteles was famous for the effect produced by showing the impression made by the touch of fingers upon the body, giving it the appearance of flesh rather than marble. Bryaxis, another Asiatic artist, carved a group representing the sensual myth of Apollo and Daphne, which was in the environs of Antioch. One ancient writer says in its praise: "The mind never wearies of remembering that form... the delicacy of the neck, the girdle, the tunic. The very statue seems to sing." The old gods fall more and more into oblivion. Only rarely is Jupiter represented as the stately old lord of the world; he is even confounded with Asclepius. The only type created or perfected is that of Bacchus, or Dionysus, always a sensual one, and it was most natural that this old Asiatic god should now be Hellenized. It is interesting to

Fig. 547.— Bust of Venus from near Madhia. *(Museum of Tunis.)*

see him becoming younger and ending by being a beardless youth crowned with leaves. He is the only god who renews his youth as time goes on; most of the Greek gods grow older. Even the Christ of the catacombs is at first without the beard which is added later.

We begin to see in Alexandrian art certain other deities of second rank, some of whom deviate from the normal human form. The restless and agitated slumber of the Furies is admirably rendered in the head in the Museum delle Terme (fig. 548).

Muses and giants now begin to appear as well, and, most popular of all, fauns and satyrs offer new and graceful themes to the sculptor. The group of centaurs found in the ruins of Hadrian's Villa is most unusual (figs. 550 and 551). An old centaur whose hands are bound behind his back is mounted by a Cupid who pulls his hair with masterful air, evidently a representation of senile love. The figure of the Cupid has not been lost in the copy of this group that is in the Louvre (fig. 549). Very different is the young centaur from Hadrian's Villa, which walks cheerfully along snapping his fingers. Although we still see the place where Cupid sat upon his back, the body was evidently no heavy burden for his youthful strength. These two centaurs, a piquant illustration of an epigram on love, are believed to be the work of Aristeas and Papias of Aphrodisias.

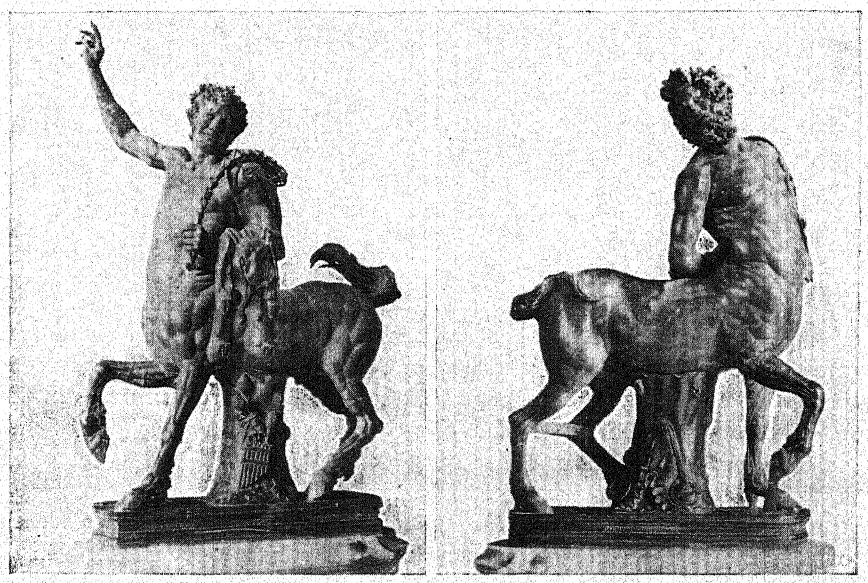
Fig. 548. Sleeping Fury. *(Museum delle Terme.)* ROME.

Religion becomes more and more an intellectual worship of the Supreme Being, the Ruler of the universe. We get some conception of this intelligent mysticism, the precursor of a higher faith, from the statue of the praying youth, a bronze copy of which is now in the Museum of Berlin (fig. 552). This was the work of a pupil of Lysippus named

Boëthus. Moreover, instead of the old gods and goddesses we now see personifications of cities. Such is the representation of Antioch by Eutychides, of which it was said in ancient times that the bronze in which it was cast seemed more fluid than water. The figure sits upon a rocky eminence and holds some ears of grain in her hand. On her head is the crown of towers, an indispensible attribute of the personified city. Very apt is the topographical allusion expressed by the child emerging from the ground at her feet, for the River Orontes, after flowing for some distance underground gushes forth at Antioch. Eutychides was also a pupil of Lysippus, and the art of the master is to be seen in the majesty of the figure and the graceful folds of the drapery (fig. 553).

Fig. 549. — Old centaur and Cupid. *(Louvre.)*

Sculptural representations of cities, rivers, and the like, became more and more frequent as time went on. These were the models followed by the sculptors of the public statues of Rome, of whom compositions of this sort were often



Figs. 550 and 551. — Young centaur and old centaur from Hadrian's Villa. *(Capitoline.)*

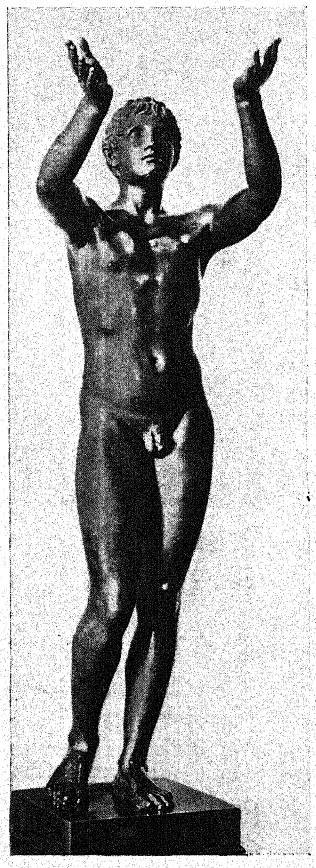


Fig. 552. — The praying youth by Boëthus. *(Museum of Berlin.)*

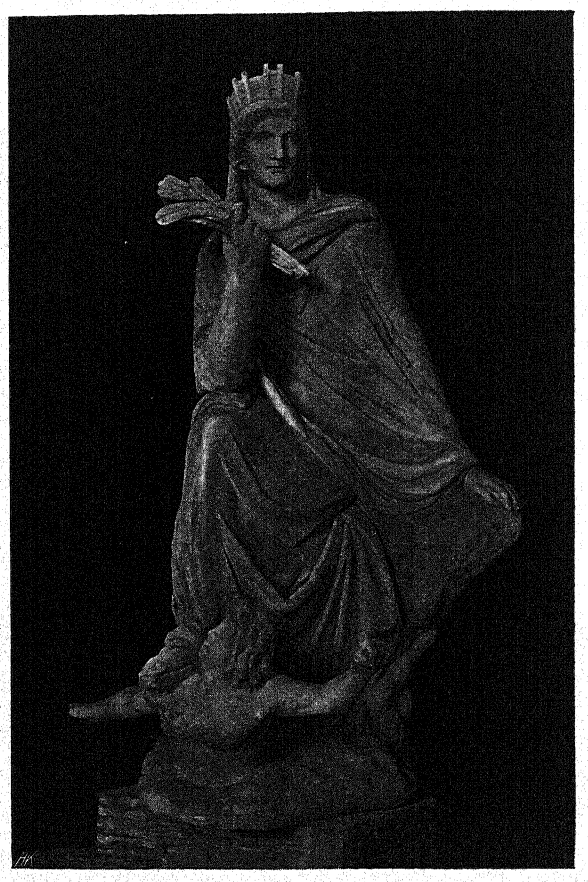


Fig. 553. — Antioch, by Eutychides. *(Museum of the Vatican.)*

required. In the bottoms of two silver vessels, probably made in Alexandria during the early years of the Roman Empire, we see handsome figures in high relief; one represents the city of Alexandria as a seated Minerva (fig. 554); the other consist of two women's heads personifying Alexandria and Rome. The allegorical Nile group, which also probably dates from the Roman period, suggests an analogous inspiration. The great river is represented as the recumbent figure of an old man with flowing beard and crowned with ears of grain, reclining against a sphinx and a cornucopia. Sixteen small children, representing the number of cubits the Nile rose each year, swarm about his body, one of them even sitting upon his right shoulder (fig. 555).

This Nile group was imitated at Rome, where a statue was carved to represent the Tiber and which formed a companion group for the former. Out in the Provinces the rivers of the various parts of the Empire were represented in the same manner during the Roman period. The figure of a god lay stretched out upon the ground, and his aquatic nature was indicated by a jar or amphora

beneath his arm. From this a jet of water gushed. There is a statue of the Guadiana in the Museum of Seville and the fragments of the river god of the Rhine in the Museum of Bonn. The artistic tradition of such a figure leaning against a jar of water even survives in Christian art as well in the representation of certain springs and localities. If a spring, it is a female figure; if a river, a male one.

Fig. 554. — Plate ornamented with a relief representing Alexandria. *(Museum of Berlin.)*

In addition to these allegorical subjects, we also see compositions of an idyllic nature. Also many of the works of the preceding centuries were copied with a more graceful touch during the Hellenistic period. For example, the youthful runner, who pulls a thorn from his foot after the race, is represented by the Hellenistic sculptors with a more rounded form and softer hair (fig. 556). A favorite subject often copied was that of a child struggling with a goose, a charming contest and a parody of the athletic statues of former times. The little fellow attempts to strangle the great bird and the goose offers a spirited defense (fig. 557). This group was often copied and imitated; the original was ascribed by the ancient writers to Boëthus, whom we have already mentioned as the sculptor of the Praying Youth. Later, during the Roman period, the group of child and goose was executed with much less spirit; here the goose caresses the child and the struggle is a rather tame one.

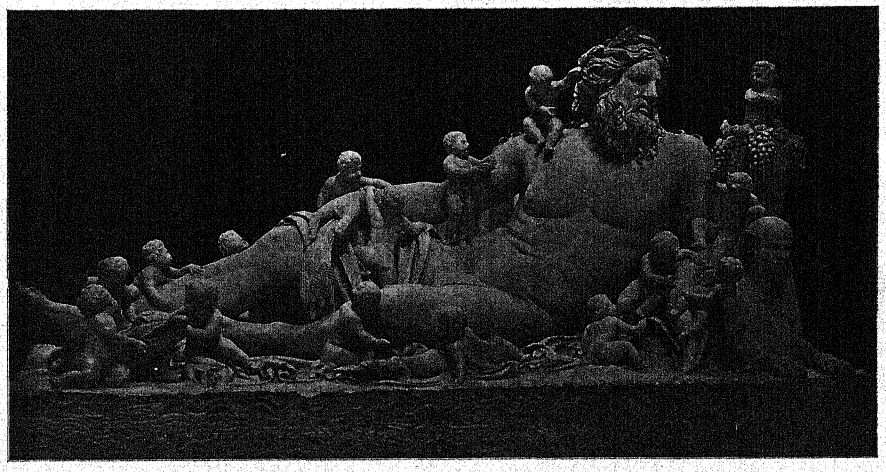


Fig. 555. — Allegorical group representing the Nile. *(Museum of the Vatican.)*

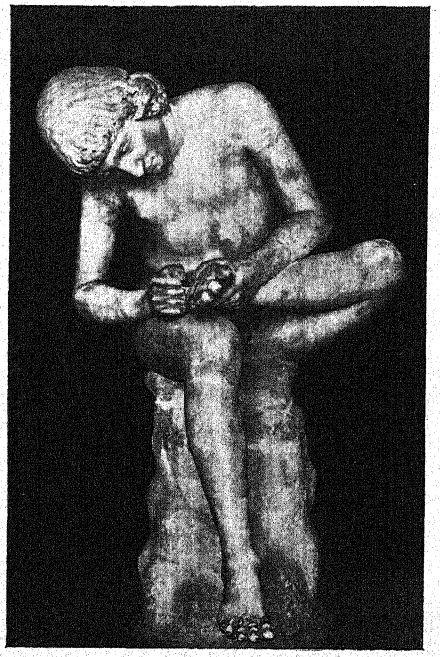


Fig. 556. — Youthful runner taking a thorn from his foot.

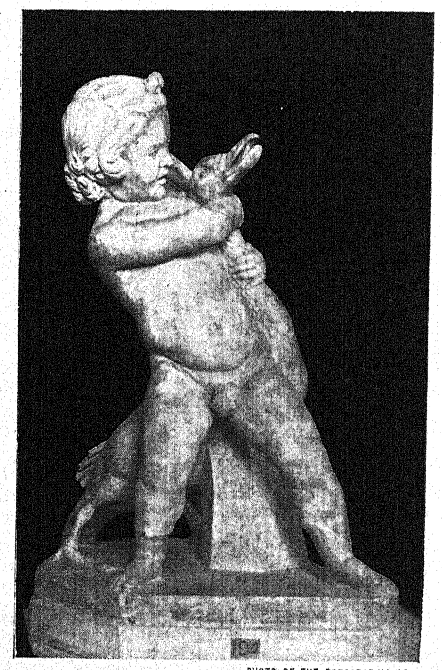


PHOTO OF THE ROTOGRAPHIC CO.

Fig. 557. — Boy strangling a goose. *(Museum of the Vatican.)*

The last stage of the evolution of this group by Boëthus is seen in the Roman fountain preserved in the Museum of Valencia, where the goose appears to whisper into the ear of the smiling child (fig. 558).

Fig. 558. — Boy with goose. *(Museum of Valencia.)*

Although not the most characteristic example of these statues of children, the most poetical is the group of two children kissing, the so-called Cupid and Psyche of the Capitoline Museum (fig. 559). We might think this a plastic illustration of the romance of Daphnis and Chloe, a charming story of the love of two children by Longus, if it had not been written later. Their bodies have a feminine softness; the boy smiles as he kisses the little girl who bends her head in surprise at the caress of the little shepherd. Even in a corrupt Hellenistic metropolis sculptor and writer alike found a public appreciative of a simple pastoral idyl.

In addition to subjects the poetical nature of which conferred a certain idealization upon them, there was another artistic movement which was in the direction of a more realistic interpretation

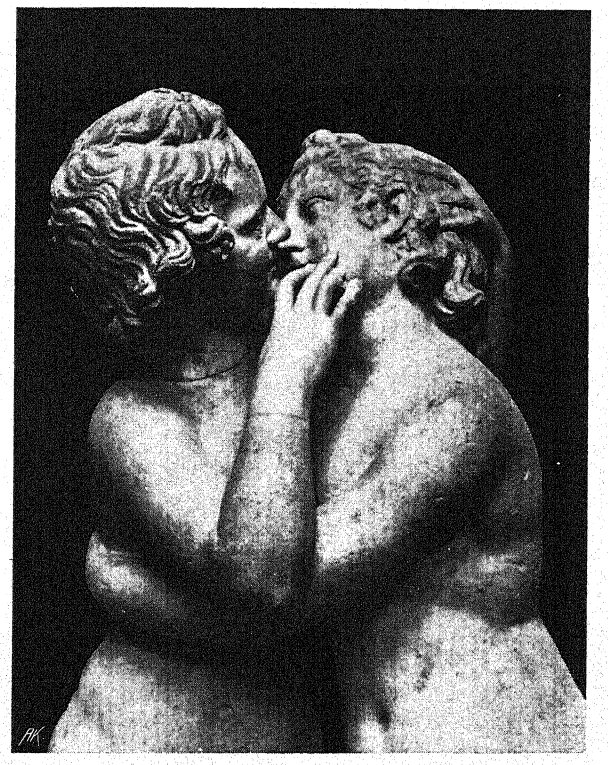


PHOTO ANDERSON

Fig. 559. — Cupid and Psyche.
(Capitoline Museum.)

Fig. 560. — Marsyas.
(Museum of Constantinople.)

of nature. An example of this tendency is the group of Marsyas hung by Apollo. The satyr's muscles are strained in a manner that appears exaggerated, anticipating a style which became popular at Pergamum and Rhodes (fig. 560). This may have originated in the portraits of this period which were better likenesses of the models than any we have yet seen. The old Greek portraits were rather rare, and as their subjects were almost always persons of superior attainments, there was a natural tendency to idealize them, as in the case of the portraits of Sappho, Aspasia and Pericles. The same was also true of funeral stelae with their portraits of the deceased and the family. Lysippus, with his enthusiasm for a vivid interpretation of nature, was the artist who opened the door to the extreme realism of this period. His portraits of Alexander the Great were both excellent likenesses and masterpieces. His brother, Lysistratus, was noted for his method of making portrait statues by making a cast of the features of the subject, but we are not to believe that he was content with the cast only; indeed, we know that the sculptors of the great period of the Renaissance also made casts as an accessory to the execution of their remarkable portrait statues.

The superb portraits of Sophocles and Demosthenes are excellent examples of the genius of the Athenian sculptors for portrait sculpture, although they date

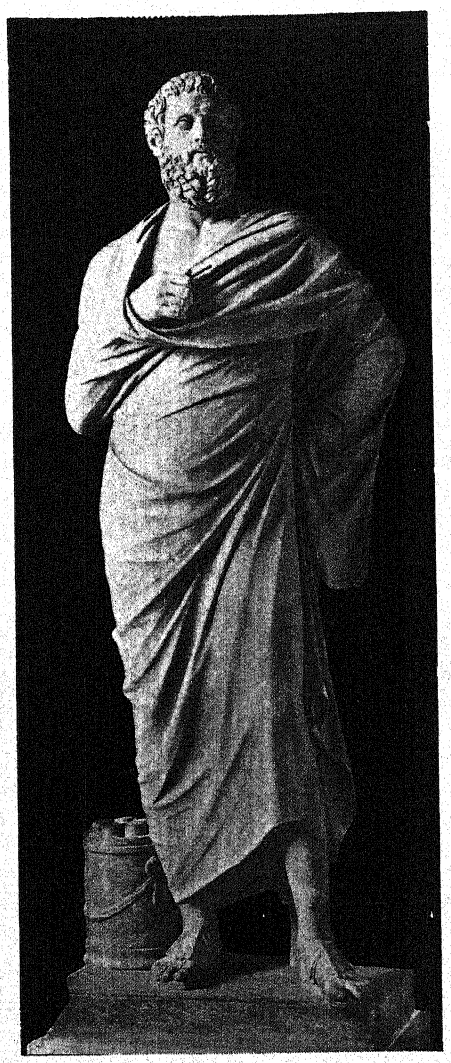


Fig. 561. — Portrait statue of Sophocles. *(Museum of the Lateran.)*

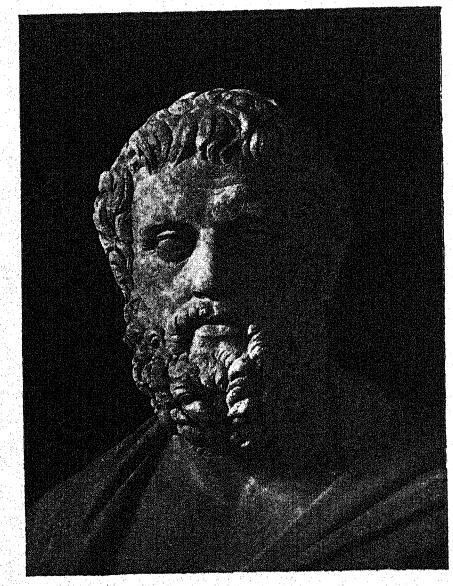


Fig. 562. — Head of Sophocles. *(Lateran.)*

from different periods, for that of Sophocles is the older of the two. The original of the latter was probably cast in bronze; it may have been one of the statues ornamenting the theatre at Athens. The only copy as yet discovered is the marble in the Museum of the Lateran which was found at Terracina in 1839. Considering it from every angle, it is a perfect portrayal of the intellectual man in full possession of all his physical and mental powers. The posture is one of complete repose, very different from the attitudes of the athletes of Polycleitus and of the Amazons, where one leg is bent, and equally different from the sensuous abandon of the Faun of Praxiteles. The Sophocles of the Lateran rests both feet firmly upon the ground; the body, which naturally shows no marks of physical toil, leans back slightly in an attitude of contemplation. The arms are drawn up naturally and gracefully without a trace of affectation (figs. 561 and 562).

The statue of Demosthenes represents another step toward realism. His face is lined, the result of the vain efforts of a great man to preserve the liberties of the fatherland. This figure is probably the work of Polyeuctes and has been very poorly restored. Instead of holding up the mantle, the hands are folded, giving

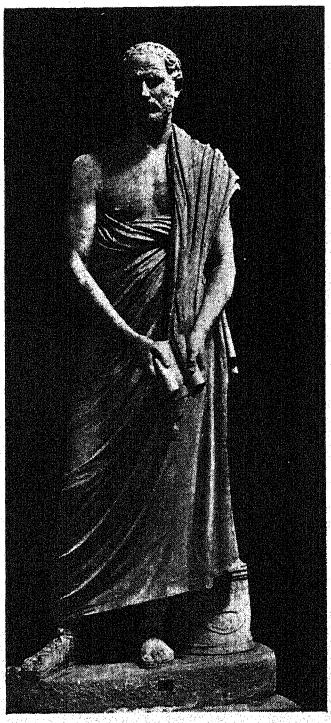


Fig. 563.—Portrait of Demosthenes.

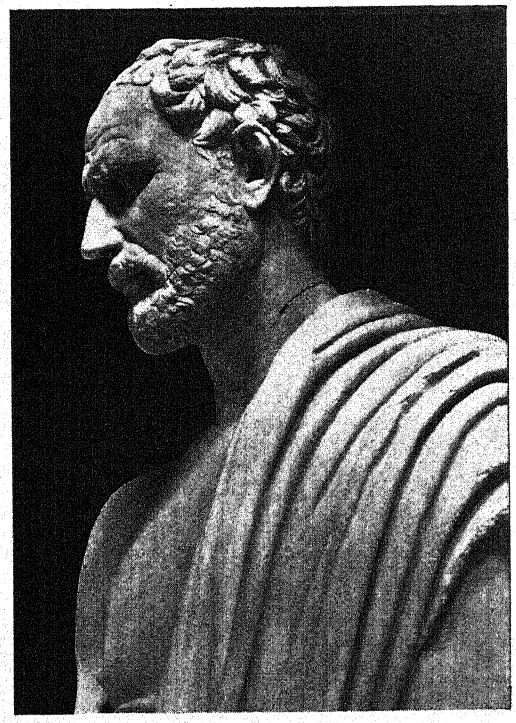


Fig. 564.—Head of Demosthenes. *(Vatican.)*

a still more vivid impression of acute anxiety. The mantle is not doubled in the full folds of that of the statue of Sophocles but gives a more disordered effect, as if disarranged by the nervous gesture of the orator (figs. 563 and 564).

Another portrait sculpture has recently been identified as that of Menander. In the smooth face and lips parted in aristocratic displeasure we see the fine and acute spirit of the great comic poet, the idol of elegant society of Athens, who was invited to honor the court of Egypt with his presence. (Plate XLIV, 1.) Several copies have also come down to us of a very interesting portrait statue of the philosopher, Epicurus, done in the style of this period. (Plate XLIV, 2). Another, which dates from the Hellenistic period, was long supposed to represent Seneca. This sculpture displays true virtuosity in its rendering of personal traits. The lines of the face, the expression of the lips, the uncombed hair, and even the moisture of the skin are all portrayed. A bronze copy of this portrait, with its metallic reflections, seems almost to perspire. (Plate XLIV, 3.) Pliny mentions a statue by Aristonidas of Rhodes, in which the sculptor mixed iron with the bronze in order that the oxidization of the iron might give a blush to the face of the subject, Athamas, who was guilty of the death of his own son.

A still more realistic statue is that of Euthydemus, king of Bactria. He is represented in informal fashion with a broad brimmed hat shading his vulgar face which could easily be mistaken for that of a laborer of the time. (Plate XLIV, 4).

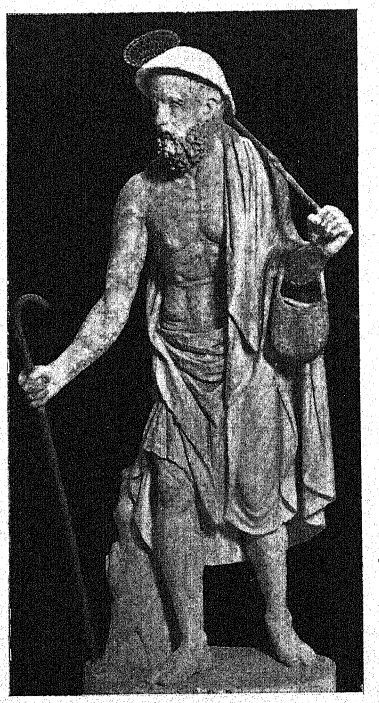


Fig. 565. — Fisherman. *(Capitoline.)*

PHOTO OF THE ROTOGRAPHIC CO.

Fig. 566. — Aged shepherdess. *(Capitoline.)*

Very different is the portrait of a youth in the Museum of Athens, which displays all the intellectual refinement of this period abounding in lofty spirits, well versed in philosophy and literature. (Plate XLIV, 5.) The statue of Seleucus I, king of Syria, now in the Museum of Naples, gives us a true idea of that restless monarch, oppressed by the cares and responsibilities of governing a great state. (Plate XLIV. 6.)

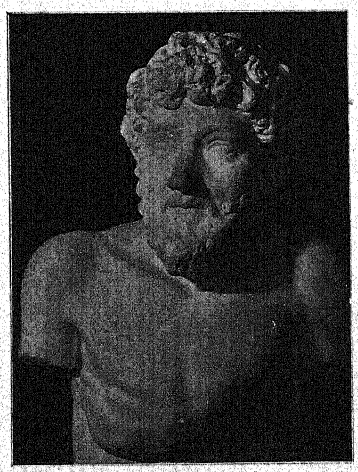
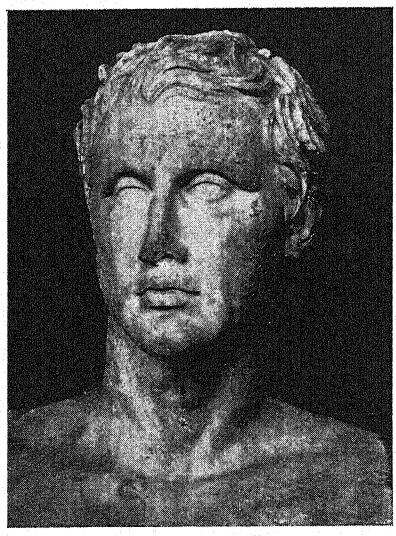
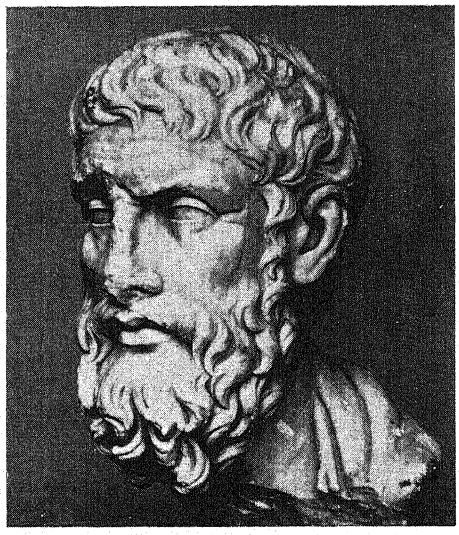
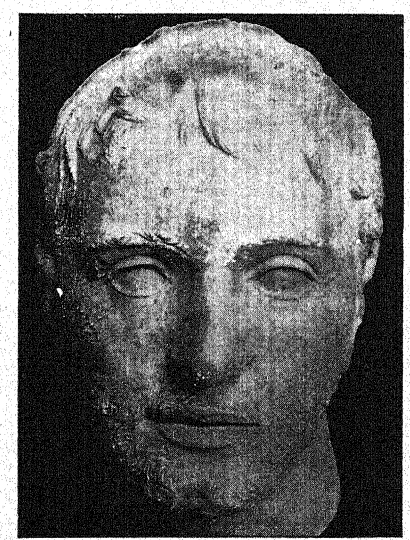


Fig. 567. — Aesop. *(Villa Albani.)*

One of the results of this realism, however, was a taste for decrepit, ugly, and even vicious figures. Two statues in the Capitoline are excellent examples of this tendency in Hellenistic art; one is of an old fisherman, and the other, of an aged shepherdess (figs. 565 and 566). These figures are the more remarkable, when we consider the aversion felt by the ancient Greeks for the representation of humanity in any other aspect than that of youth or virile maturity. The sculptors of the classical period rarely chose a child or an old man as subject, but these later Greeks, perhaps purely in a desire for novelty, displayed a







HELLENISTIC PORTRAIT SCULPTURES. — 1. Menander. *(Museum of Boston.)* — 2. Epicurus. *(Museum of New York.)* — 3. Greek man of letters, wrongly supposed to be Seneca. *(Museum of Naples.)* 4. Euthydemus, king of Bactria. *(Museum of Torlonia.)* — 5. Unidentified head. *(Museum of Athens.)* — 6. Seleucus I. *(Museum of Naples.)*

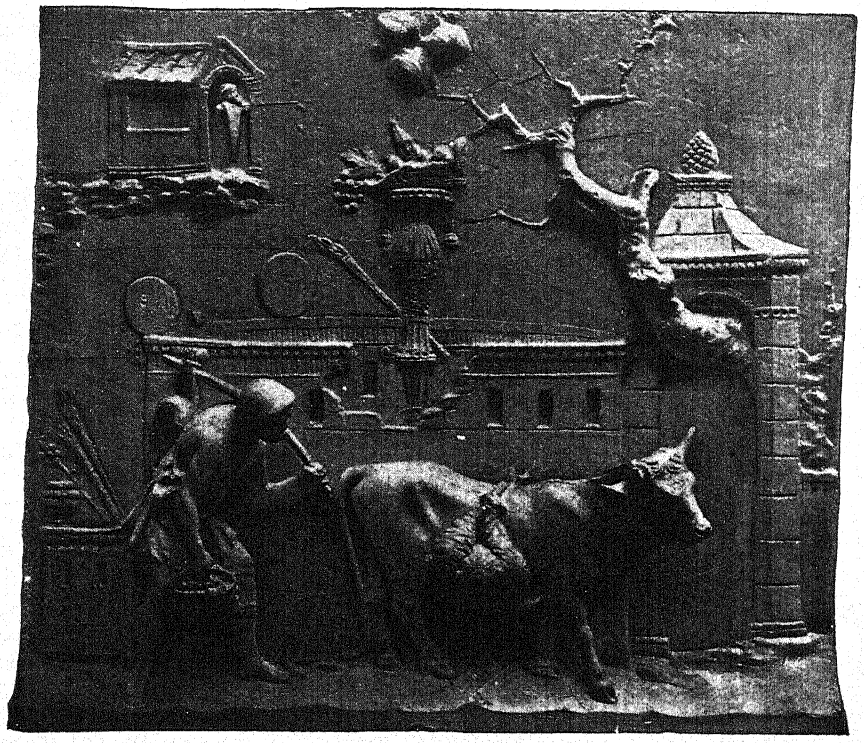
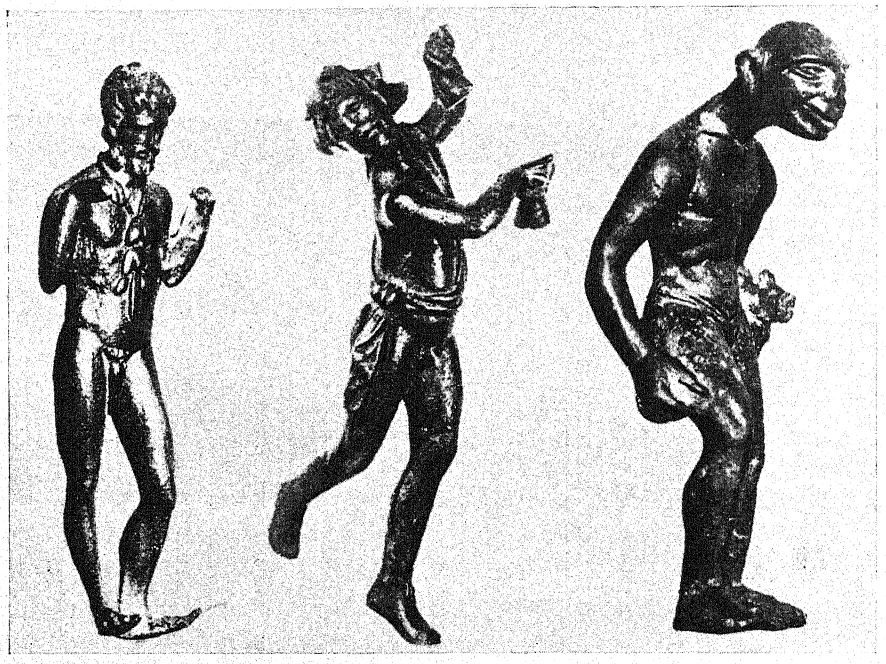


Fig. 568. — Relief of a rural scene. *(Museum of Munich.)*

fancy for old age in its grossest forms. (Plate XLV.) They must have admired the statue of a drunken old woman, for more than one copy has come down to us. All the natural dignity of her sex and age are completely lost to this disgusting creature whose flabby flesh hangs in loose wrinkles on her neck and breast.

They even found a certain pleasure in the abnormal, as seen in the statues of excessively fat old men, and their artists strove to read the very souls of their deformed models. The statue of Aesop is not only remarkable for the technique with which the compressed abdomen is rendered, but also for his revelation of the psychology of the humpback with its sadness and deep reserve (fig. 567).

Having described the principal artistic types of the Hellenistic world in general, we will now take up the recent investigations which have been made in the study of the art of the different schools, at Alexandria, Pergamum, Rhodes, and even Greece itself under the rule of the successors of Alexander. Until recently a certain series of reliefs of landscapes and figures from rural life, most poetically treated, has been considered Alexandrian. This hypothesis appeared to rest upon a sound basis; it seemed beyond question that the inhabitants of the great city would take pleasure in the portrayal of the simpler and more wholesome life of the country for its very contrast to their own. This was no doubt true of the idyls of Theocritus of which these reliefs seem to be the plastic expression. In figure 568 we see a countryman passing some old ruins on

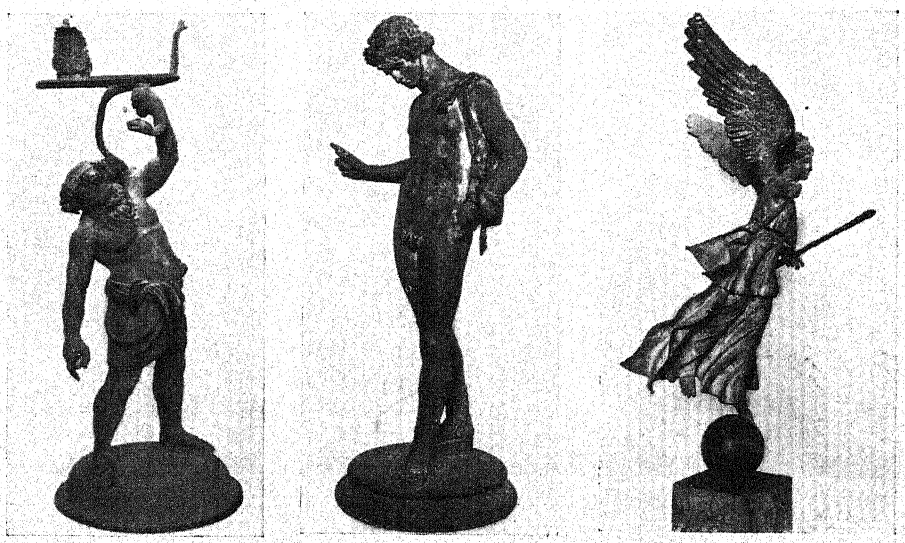


Figs. 569, 570 and 571. — Hellenistic bronzes from Alexandria. A street singer, a dancer, and a eunuch who is fishing. *(Fouquet Collection.)*

his way to market with his cow and chickens. This Platonic affection which the city man feels for the country was not characteristic of Alexandria however, and today we cannot accept as Alexandrian these rural scenes which are some of the most beautiful examples of Hellenistic art that have come down to us. The rocky landscape does not resemble in the least the level Delta of the Nile, nor are the flora and fauna those of lower Egypt. There are no palm trees, but on the contrary, many platane trees, which are not found in the country near Alexandria. Having rejected these reliefs representing rural life, Alexandrian art remains more or less of an enigma. All the schools of art belonging to this period were probably represented in the great metropolis, and it is not unlikely that the wealthy art patrons were pleased with all the different styles. But we know that Alexandria differed from the other great cities in two respects. One was the well known taste for the sensual Praxitelean types, softened even more than elsewhere by a certain affectation of delicacy; sharp outlines are lacking, an effect which has been called the Alexandrian *sfumato*. A good example of this is the magnificent statue of Venus recently discovered by the Italians at Cyrene, which must have come from Alexandria. The other peculiarity of the art of this city was its preference for street types, often grotesque, which abounded in that great melting-pot of the nations of antiquity. The chief evidence of this unusual taste is the large number of small bronze figures from Alexandria. These give us some idea of the picturesque street scenes offered by the city, with its vendors, musicians, dancers, gamins and mimes. The last

were the masked comedians who improvised their pantomines in the street, parodying local ocurrences of general interest (figs. 569, 570 and 571). More rarely do we find figures representing life in the country among the numerous bronzes found there. The same types were repeated over and over again, but they never bear witness to the love for the country that has been ascribed to the people of Alexandria. In searching for the inspiration of their art we should look rather to the verses of Herodas, the elegant city poet, and to the epigrams of the Anthology than to the idyls of Theocritus. They were an ironical and witty people well aware of their own failings, but more inclined to make fun of them than to take them seriously. The art of Greece had scorned subjects taken from common life, but the Alexandrian sculptors represented them with the most exquisite taste. We even find negroes, eunuchs and people of the slums faithfully portrayed in these graceful bronzes.

Here again the delimitation of Alexandrian art is most difficult. Not only in Alexandria do we find the tastes which we have mentioned, but this liking for what we might call anecdotal art extended all over the Hellenistic world as well, as evidenced by the small bronzes from other places. In addition to those discovered at Alexandria, we have reproduced others from Pompeii and from the famous wreck at Madhia. Those from Pompeii are not so significant, for the neighboring port of Pozzuoli was in close communication with Alexandria. Still, it seems remarkable to find in Pompeii also a Dionysus bearing a lamp (fig. 572); an elegant youth, possibly Narcissus, looking into the water (fig. 573), or more likely playing with a dog that has been lost; or a miniature Victory, a graceful figure with the wings of a dove (fig. 574). Even these Hellenistic bronzes from Pompeii do not resemble those of Alexandria as much as do those found near Madhia which had come from Athens, so we see that Athens, too, was not



Figs. 572, 573 and 574. — Hellenistic bronzes found at Pompeii. Dionysus, Narcissus and Victory. *(Museum of Naples.)*

Figs. 575, 576 and 577. — Hellenistic bronzes from Athens. Cupid with a lyre, and a pair of dancing dwarfs. *(Museum of Tunis.)*

backward in following the new styles in art. The little Cupid (fig, 575) richly decked out with necklace and arm and leg bands, and the dwarfs (figs. 576 and 577) seem to be the companion pieces of the dancers and singers from Alexandria (figs. 569 and 570).

A study of the style of the Pergamene school presents much less difficulty, for Pergamum, unlike Alexandria, has yielded the works of noted sculptors. This city was noted throughout the Greek world for its dynasty of public spirited and art loving rulers. It is plainly to be seen that these highly cultivated monarchs had little taste for the piquant art of Alexandria. They collected the second greatest library of their time and lived quietly in their little capital, away from the bustle of the great metropolis. They seem rather to have encouraged the production of splendid compositions of battling giants, heroes and barbarians. The art of Pergamum, which was always on a lofty plane, seems to have been strongly influenced by the court. The populace of Alexandria, though they might have admired it, would have immediately coined an apt phrase of ridicule fatal in its effect.

Fig. 578. — Alexandrian actor. Bronze. *(Museum of New York)*

In spite of the limited area of this little state, its kings were wealthy and able to dispose of a large force of mercenaries. They won the title of defenders of the Greek race when they arrested an invasion of barbarian Gauls, a forerunner of the movement of northern peoples which was later to constitute the chief political problem of the Roman

Hellenistic art. Old woman going to the market. *(New York Museum.)*

Empire. These cultivated monarchs, proud of the prowess of their armies, directed the execution of a number of sculptural groups, which were to be set up as ex votos in the temple of Minerva Polias at Pergamum, on the Acropolis of Athens, and on the Capitoline at Rome.

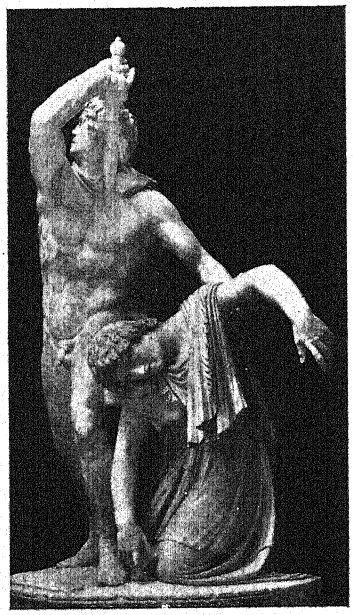


Fig. 579.— Group of the Gaul and his wife. *(Museum delle Terme.)*

These Pergamene groups portrayed various episodes of the struggle with the Galatians or Gauls. In one of these a Gaul strikes at his own breast after having slain his wife in order that they might not fall into the hands of the enemy (fig. 579). Another, mortally wounded, fixes his dying eyes upon the ground as he feebly supports himself on one arm (figure 580). Clotted blood covers his wounds and lies upon his curly hair, and his expression reflects an anguish never portrayed in Greek art up to this time. This statue aroused much admiration among the Romanticists of the early 19th century; it was thought to be a representation of a dying gladiator, and it figures as such in one of the poems of Lord Byron. It was not until 1821 that Nibby identified it as one of the Gauls of Pergamum. On the ground beside the figure lies a horn which he has sounded for aid; both the expression of the face and the horn beside him remind us forcibly of Roland sounding his trumpet before he died at Roncesvalles. It is especially interesting to note the ethnological precision of these

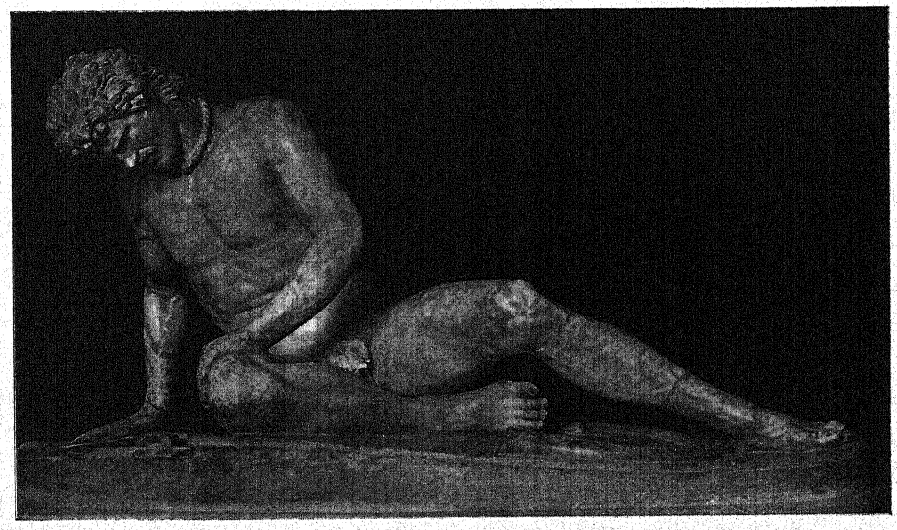
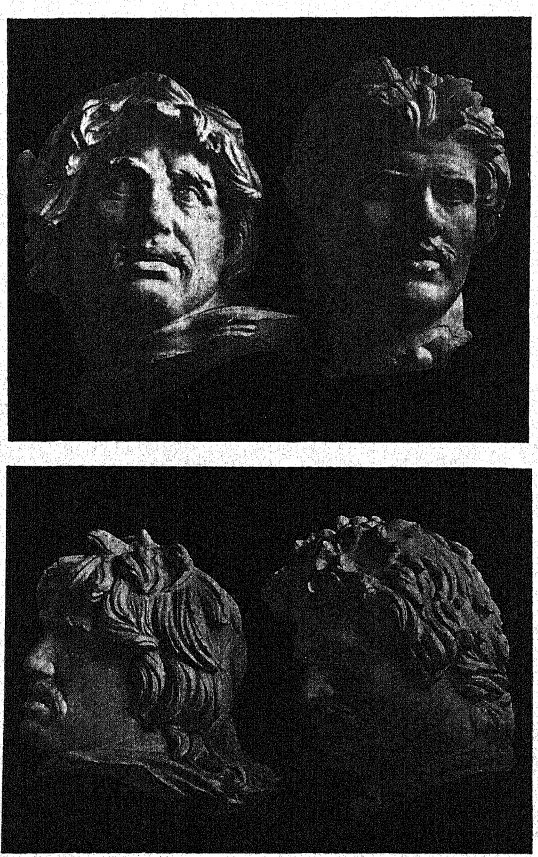


Fig. 580. — Dying Gaul. *(Capitoline.)*

sculptures; the heads of the "Dying Gaul" of the Capitoline and of the "Gaul killing his Wife" of the Museum delle Terme could be easily taken for those of the French people of today (figs. 581 and 582). We see this power to express agony steadily increasing in the style of Pergamum. The ex votos sent to Athens to commemorate the glorious victories which checked the invasion of the Gauls rank with the great Greek art of an earlier period. First we see a number of groups representing the battle of the gods and giants, then Greeks fighting Amazons and Persians, and finally the kings of Pergamum in conflict with the Gauls. Although the pathos is somewhat exaggerated, one might think that this trilogy of Pergamene sculptures was a direct continuation of the heroic tradition of the school of Phidias. This style was not confined to the court sculptors of the kings of Pergamum, but was imitated throughout the Hellenistic world. It is interesting to compare the giant's head, characteristic of the art of Pergamum, with the Titan's head found at Lycosura in Greece itself. The statue of a Gaul in the Museum of Alexandria and that of a Gaul or Persian found in Rome (now in the Museum delle Terme), are excellent examples of a style which was believed until recently to have been exclusively the style of Pergamum. Thus we see in three widely separated parts of the Greek world examples of the art which has been called Pergamene until now. A further victory over his barbarian neighbors impelled Eumenes II of Pergamum to erect a magnificent altar to Jupiter, the great base of which was ornamented with a sculptural frieze. The altar itself was set within a colonnade of Ionian columns, but its artistic importance is due to the reliefs of the base of the colonnade, which represented the battle of the gods and giants. (Plate XLVI, A.) This frieze was still intact during the first years of the Christian era, for the Apocalypse speaks of the altar of Pergamum as the "throne of Satan". This masterpiece was excavated by a German engineer named Humann and almost the entire frieze was transported to Ber-



Figs. 581 and 582.-- Heads of the Gauls reproduced in figures 576 and 577.

Fig. 583. — Giant's head from the altar of Pergamum. *(Museum of Berlin.)*

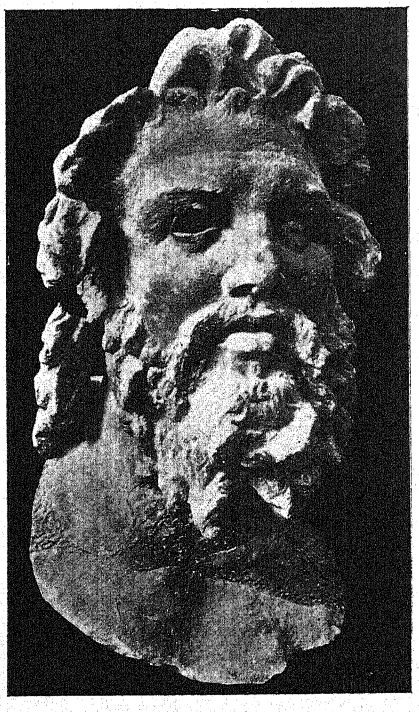


Fig. 584. — Titan's head. *(Museum of Athens.)*

lin, where it was set up in the Museum. The figures are carved in high relief and are modeled in every detail with a vigour that is remarkable; the muscles are accentuated as if to show the superhuman strength of the gods and giants. This frieze is about four hundred and thirty feet long and shows a considerable variety of subject; one portion represents Minerva accompanied by her faithful Victory, shrewdly lifting the giant Alcyoneus by his hair, because he lost his strength when separated from the earth. His mother, the earth goddess Gaea, implores Minerva's clemency for her rebel son. (Plate XLVI, B.) On another portion of the frieze we see Jupiter smiting three giants at once with spear and thunderbolt. The Sun and Moon in their chariots battle on the side of the gods. Some of the giants have lions' heads; others, enormous tails. The style varies in character in the different parts of the long frieze. In some sections, the figures display a softer modeling suggesting that the artists, drawn from various parts of the Greek world, did not all unite in the note of violence and convulsion, which is so characteristic of Pergamene art in general.

Next to the schools of Alexandria and Pergamum, the most important was that of Rhodes, where a number of the pupils of Lysippus had taken refuge. Among them was Chares of Lindus, the creator of the Colossus of Rhodes, which was set up about 280 B.C. It was overthrown by an earthquake fifty six years later, but its remains still lay on the ground and were much admired as

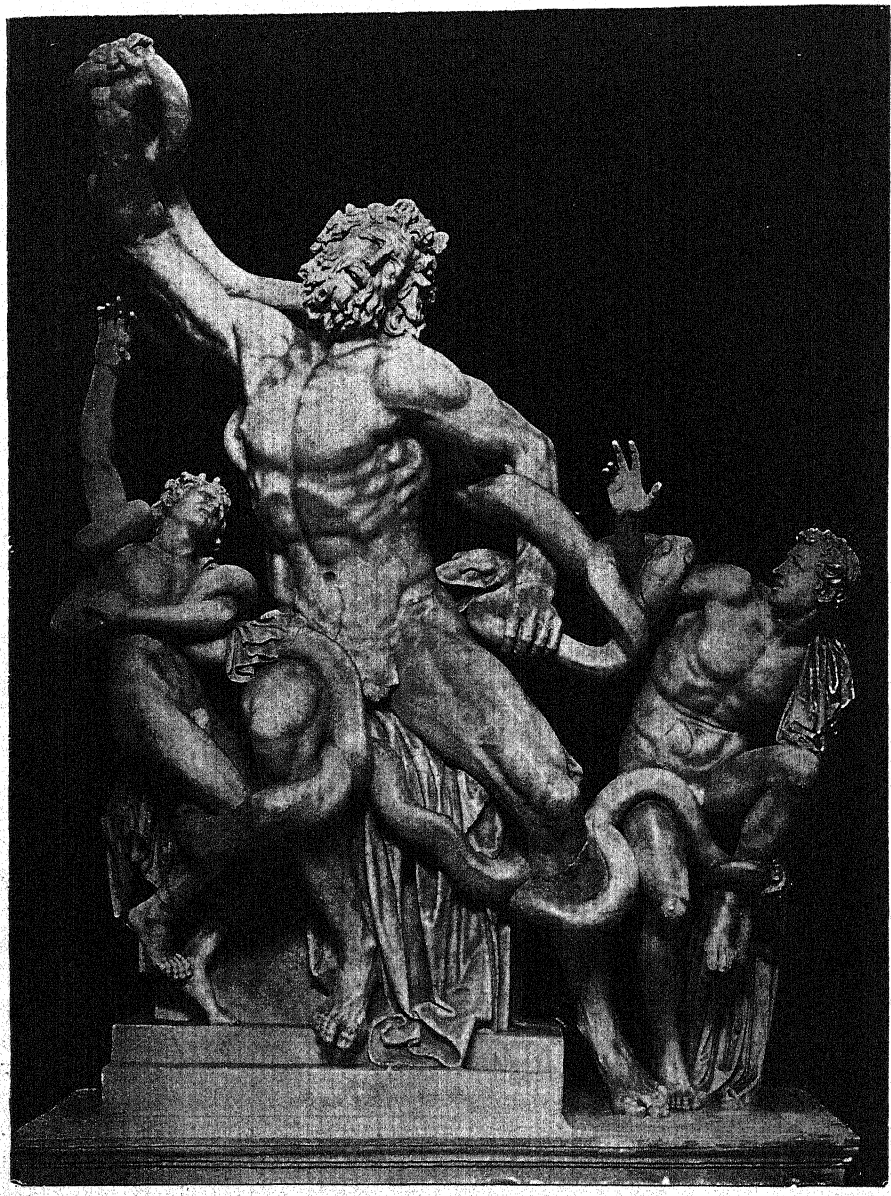
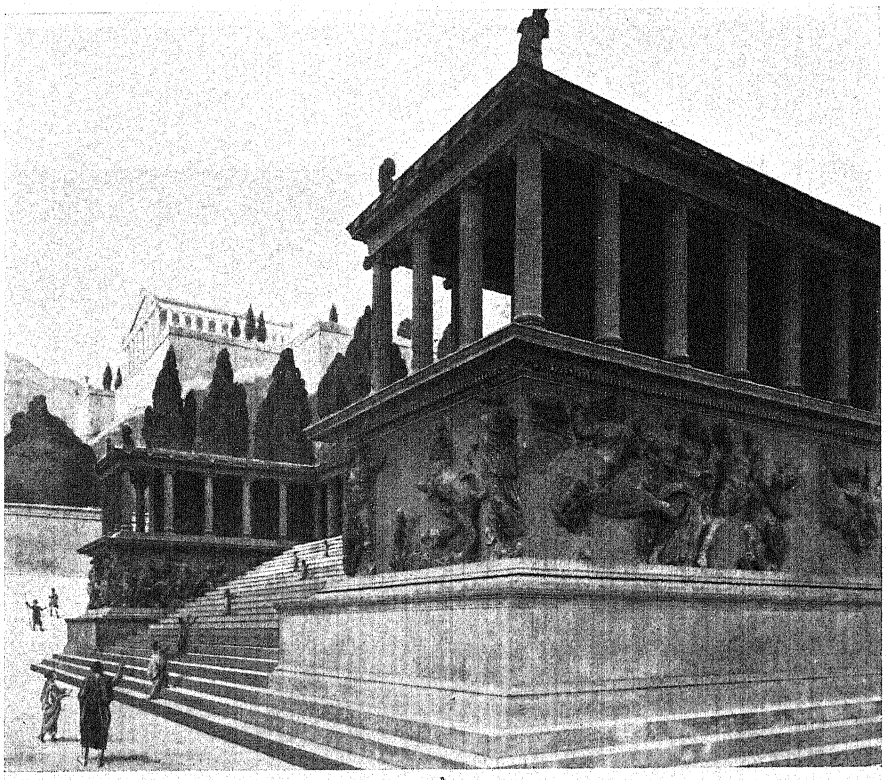


Fig. 585. — Laocoon Group. *(Vatican.)*

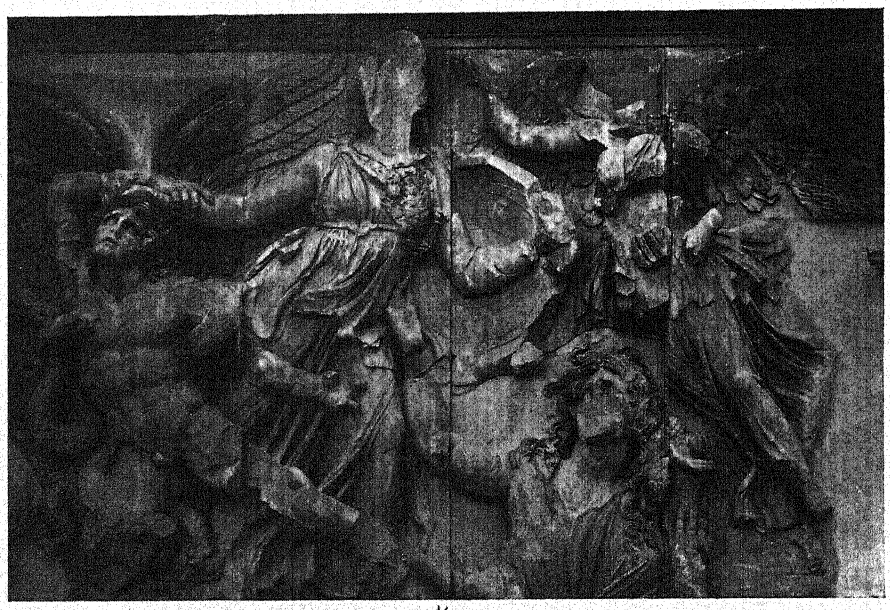
late as Pliny's time. As no copies of the Colossus of Rhodes now exist and no sculptures were discovered on the ground during the recent Italian occupation of the island, we must turn to two famous sculptures in Rome which were brought from Rhodes and were mentioned by the writers of antiquity, for our study of the Rhodian school.

One of these is the Laocoon group, found in the so-called Baths of Titus,



A.

Restoration of the Acropolis of Pergamum, with Altar of Jupiter in the foreground.



B

Relief from the Altar of Pergamum. Minerva battling with Alcyoneus. *(Museum of Berlin.)*

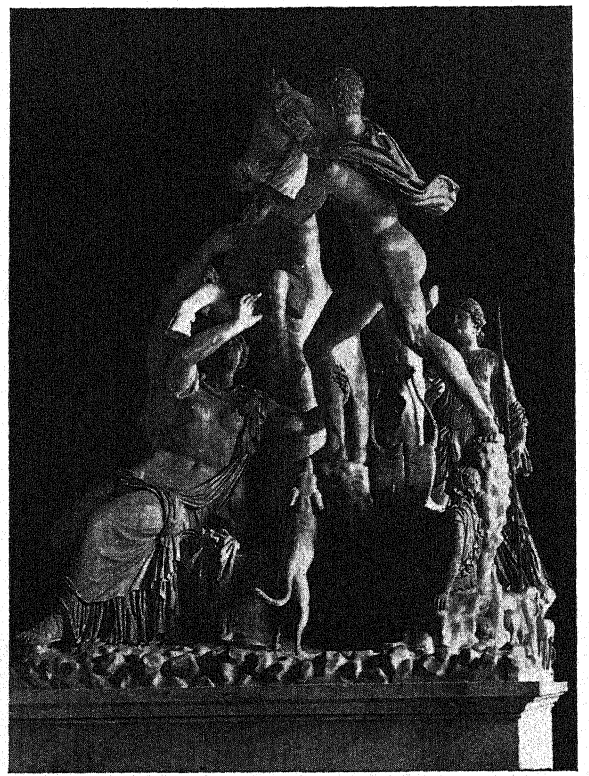


Fig. 586. — The Farnese Bull. *(Museum of Naples.)*

where it was much admired by Pliny *(in Titi imperatoris domo)*. It was the work of Agesander of Rhodes and his sons Polydorus and Athenodorus, but it is thought to have been carved as the result of a consultation of a large number of artists *(de consilii sententia)*. Here we see in a still more exaggerated form the theatrical effect produced by the anatomical interpretation employed in the famous frieze of Pergamum. To this is added the physical pain of a death by strangulation and the mental agony with which the Trojan priest sees the death of his sons. The three figures are constricted in the folds of two serpents. Laocoon's breast swells and his muscles and veins stand out in an exaggerated manner. The face and body are contorted beyond all human possibility. No living person could undergo such a strain. And yet Pliny called the Laocoon a "work superior to all the other works of sculpture and painting." Discovered in 1506, it is hardly necessary to say that the Laocoon was highly interesting to the baroque sculptors from the time of the pupils of Michelangelo down to the latter part of the eighteenth century. All during this period the Laocoon was admired as one of the masterpieces of antiquity. We still appreciate its marvelous technique and its extraordinary pathos, but our great interest lies in the fact that it represents the climax in the development of ancient art. It no longer has for us the originality and beauty that it once had; other works have taken its place in this respect, and we are now too familiar with the antecedents of this Rhodian school to wonder at the Laocoon as an isolated phenomenon. The sculptures of the altar of Pergamum alone would be sufficient to show that the Laocoon was but one of a series of similar works.

The appreciation of the people of Rhodes for this kind of sculpture attracted from other localities those artists who were inclined toward that which was pretentious and showy. This theatrical tendency of the Rhodian artists is shown still more plainly in the "Farnese Bull", where Dirce is punished by

Fig. 587. — Venus and Mars. Pompeiian fresco. *(Museum of Naples.)*

being bound to the horns of a bull. This colossal composition was brought to Rome by Asinius Pollio and a copy was made to ornament the Baths of Caracalla, where it was discovered in the sixteenth century and taken to the Palazzo Farnese. It is now in the Museum of Naples (fig. 586). It has served as one of the models used in the royal pottery at Capodimonte near Naples, and it is interesting to note that this colossal group gains in artistic value by its reduction to a bibelot. As a matter of fact, the large group is so complex that it can not be seen as whole from any one point of view, but the small porcelain replica may be taken in at a glance. The theme is taken from Euripides' Antiope and represents the moment when Zethus and Amphion avenge the injuries of their mother. They are binding Dirce to the horns of the wild bull which is to drag her to her death. The two brothers hold the resisting animal, Zethus has in one hand the cord which is already attached to the horns of the bull, while with the other he seizes the hair of Dirce who is seated on the ground. From behind the animal, Antiope tranquilly watches the scene. In spite of the many picturesque features introduced by the sculptor to give an idea of the environment, such as the rocks, the dog, and the little shepherd who looks upon the vengeance of the mighty heroes, and in spite of the mastery with which the sculptor has combined his figures in a pyramidal composition, the group does not awake our enthusiasm. We feel that the artist has exceeded the bounds of sculpture in order to produce a theatrical effect.

Fig. 588. — Medea. *(Museum of Naples.)*

We also know something of the work of another Rhodian sculptor named Philiscos, who carved a group of the Muses. This was composed of a number of sepa-

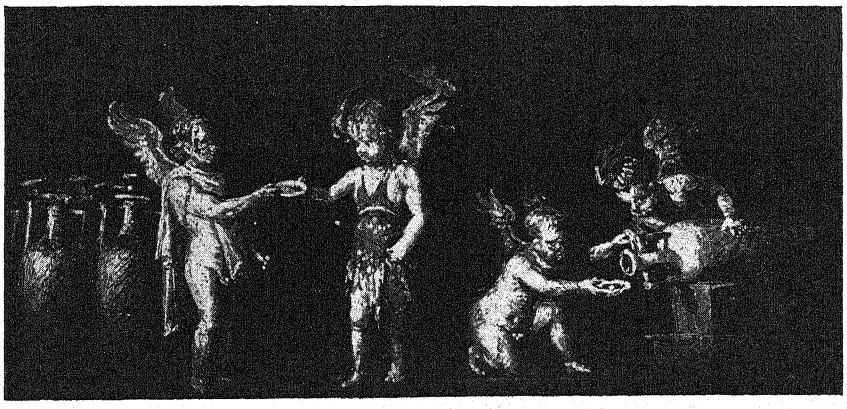


Fig. 589. — Cupids dispensing wine. *(Museum of Naples.)*

rate statues which must have stood about the central figure of Apollo. Some of these graceful figures seem to have become types, for they were truly inspired. That of Polyhymnia, enveloped in the folds of a broad mantle, was often reproduced in Roman copies. Urania, a pensive figure, sits with her head resting upon one hand. We know something of the general arrangement of this group from a relief in the British Museum; the figures were set about in a garden and were in different planes.

Taking up the subject of Hellenistic painting, we find the subjects portrayed becoming more and more common, running to comic and genre scenes. If they are taken from the old myths, they are softened to suit the tastes of the time. A good example is the small picture of Mars and Venus found in Pompeii. Little Cupids play with the weapons and helmet of the war god who seems about to break away from the embraces of the goddess. He points to distant fields of action, but other Cupids come bringing perfumes and the goddess holds him. There is a vulgar touch to the whole composition which makes

Fig. 590. — Mosaic representing fishes, found at Emporion. *(Museum of Barcelona.)*

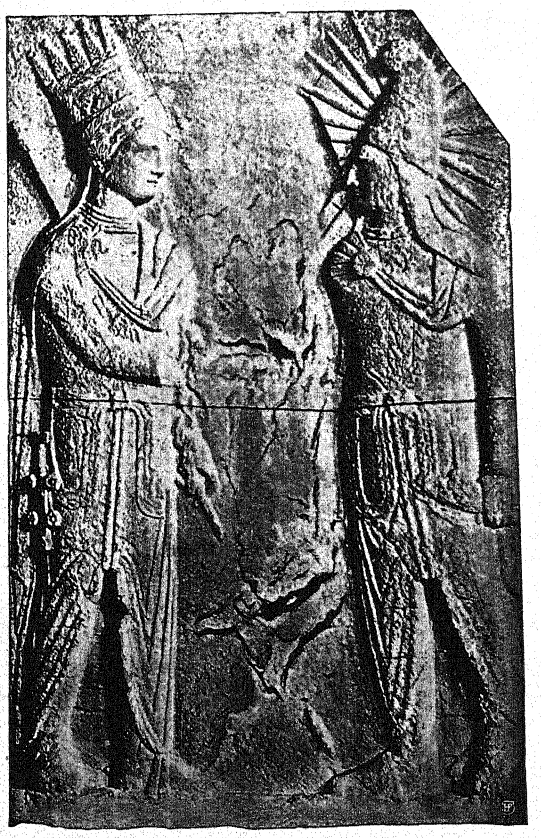


Fig. 591. — Antiochus I and the Sun God (Nerud-Dagh).

it almost a caricature (figure 587).

At times the painters attempted to interpret a violent or complex emotion, and, like the sculptors, they turned to the most tragic situations. Timonachus of Byzantium painted a famous picture of the madness of Ajax, a subject taken from the tragedy of Sophocles which he interpreted admirably. He also made a picture of Medea, of which the Pompeiian fresco may be a reproduction (figure 588). The original was purchased and taken to Rome, where it was most highly esteemed for the manner in which the painter had given expression to the unrestrained passions of the heroine. Her jealousy and desire for vengeance, as she is about to sacrifice her children, is vividly expressed.

Sometimes the great heroic themes were ironically interpreted; masked Cupids were substituted for the tragic characters. In one such frieze at Pompeii we see little Cupids buying and selling, obviously a satire on ordinary life (fig. 589). We know the names of artists who were famous for their studies in still life, their pictures of cook-shops and, like our modern impressionists, for their light effects. Others devoted themselves to landscape painting; in some scenes from the Odyssey, now in the Vatican, the settings of rock and sea are painted by a master hand. In some of the paintings of Pompeii masses of color are employed with almost an entire absence of outline or detail, much like the impressionistic paintings of today. Alexandria made a specialty of painting on glass, used for wall decoration. Floors were covered with mosaics of colored marble; in the centre was a reproduction of some famous painting, more or less modified by the technique of that art. Some subjects, however, were especially suited to mosaic; one rather bizarre mosaic design was the reproduction of oyster shells, bones and other debris of a great banquet lying about on the floor. The bottoms of fountains and baths were represented as the bottom of the sea and ornamented with pictures of fishes in mosaic (fig. 590).

Articles of luxury also reflected the ostentation of the period. Not only

The Portland Vase. *(British Museum.)*

the princes and monarchs of Asia and Egypt, but also the wealthy merchants and bankers of the free cities possessed jewels and rich fabrics in abundance. The Oriental tastes of the Greek princes of Asia are shown by the suggestive relief representing Antiochus and the Sun God (fig. 591).

This relief forms part of the decoration of the enormous tumulus crowned with colossal statues which was the tomb of Antiochus. Both monarch and Sun God are dressed in long embroidered garments. Antiochus is dressed in the rich mantle and lower garments characteristic of the Oriental rulers. A sculptural fragment, now in Athens, reproduces the folds of an embroidered mantle and shows the magnificence of the rich cloths of this period in Greece (fig. 592). This fragment formed part of a monumental sculptural composition at Lycosura, the work of Damophon, of which the enormous head reproduced in figure 584 was also a part. There still exist cups and plates cast in relief, which date from the Roman period, but which are undoubtedly imitations of Hellenistic work. The ornamental ivy, laurel and olive leaf patterns so popular in Roman art seem to have originated in the shops of the goldsmiths

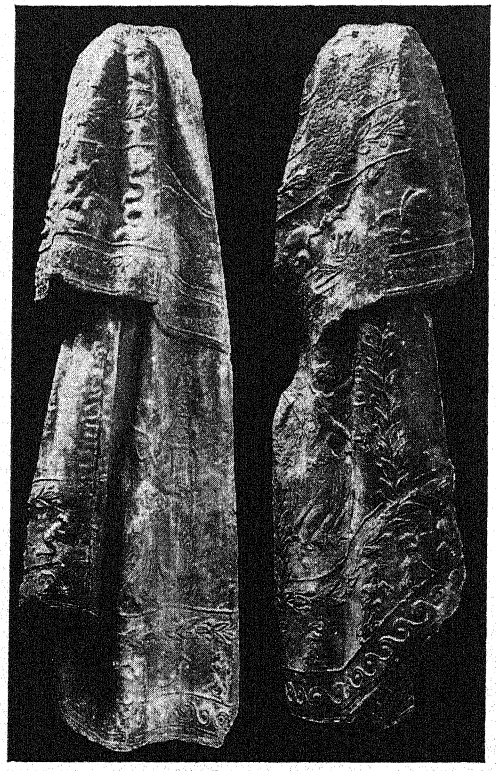


Fig. 592.—Embroidered mantle. *(Museum of Athens.)*

Fig. 593.—Graeco-Roman vessels from the Treasure or Hildesheim. *(Museum of Berlin.)*

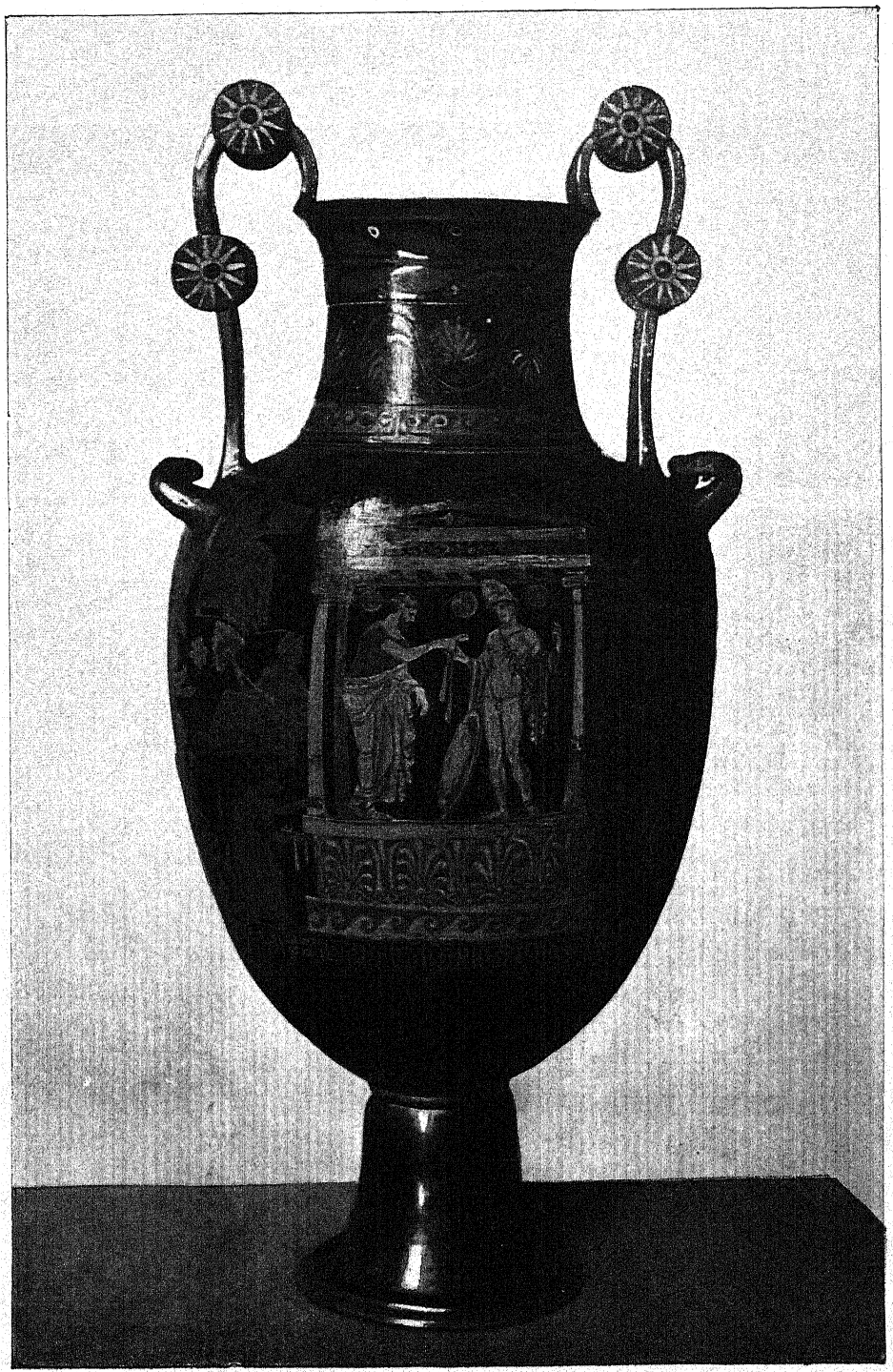
Fig. 594. — Cameo of Vienna.

Fig. 595. — Cameo of Petrograd.

attached to the Hellenistic courts of Asia and Egypt (fig. 593). The wealthy collectors of Rome acquired many precious objects from Egypt and Asia, among them the famous onyx cup ornamented in relief formerly in the Farnese collection and now in the Museum of Naples. In the bottom, carved in the different layers of the striated stone, are portrait figures and the allegory of the River Nile. It is probably part of a table service dating from the times of the Ptolemies. Cameos were made in Egypt in large numbers, making that country famous for its carved precious stones. A certain Pyrgoteles of Alexandria carved gems which have never been excelled. Two marvelous portrait cameos of Ptolemy II and his wife Arsinoe, now in the museums of Vienna and Petrograd, are masterpieces of the engraver's art (fig. 594 and 595). The one in Vienna shows the two faces carved in relief from nine alternate black and white layers. That of Petrograd, called the Gonzaga cameo, is a somewhat less delicate representation of the same faces, although the crown of Ptolemy bears a beautiful egis of feathers.

Fine portraits are often found on coins as well, although there was a tendency among the successors of Alexander to have their faces idealized, and a resemblance to the typical portraits of the Macedonian conqueror was also sought (fig. 596). The two curls of Alexander, mentioned in the last chapter, become the horns of Jupiter Amon, of whom Alexander and his successors were supposed to be the reincarnations. Alexandrian glass is most beautiful with its layers of different colors sometimes carved like a cameo. The best example of this is the famous Portland Vase in the British Museum. (Plate XLVII.) Instead of striated stone like onyx or agate, the figures which represent the story of Achilles are cut from a milky layer of glass which has been superimposed on the blue glass forming the body of the vase. It was

Fig. 596. — Coin of Ptolemy II.



Apulian vase of the third century B.C.

found at Rome and became the property of the Duke of Portland, who brought it to England, where it promptly inspired the manufacture of the beautiful blue and white porcelain of Josiah Wedgwood.

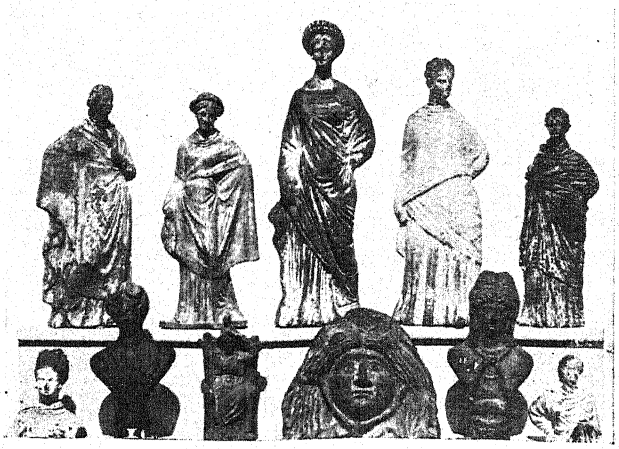


Fig. 597.— Tanagra figurines of terra-cotta. *(Museum of Madrid.)*

Nevertheless, the ceramic art of this period was not widely popular. The public lost interest in the painted vases of Athens, and the potteries there ceased to decorate their ware with figures some time during the third century B.C., but finished it with a uniform black gloss instead. Only in the cities of southern Italy did the old Greek pottery retain its popularity. (Plate XLVIII.) These vases, called Apulian, are black with lighter earth-colored figures superimposed like the earlier Athenian ware. To make a clearer outline and give more detail to the decoration white is also freely used, usually in the form of curlicues and palmettes in a sort of baroque style that is always very pleasing.

The art of making terra-cotta figurines followed the evolution of Greek sculpture in a general way, but it was not until the Alexandrian period that they attained their highest state of development. These little figures are commonly called Tanagra figurines, because of the high excellence of those from Tanagra in Bestia, also because they were the first to fix the attention of scholars. They often reproduce the Praxitelean types, usually in the simplified form suitable for a bibelot, and consist of figures dressed in elegant mantles, nude figures of Venus and groups of dancers and Cupids. Their charm is often such that they impress us more than the great master-pieces of the period. They are so abundant that we find them in all the museums of Eueope, to say nothing of private collections. Here we have, as Michaelis justly remarks, "the products of an industrial art, the creations of a provincial art which is fed from the artistic source of Athens." They were pressed in moulds and turned out in great quantities, it is true, but there was no lack of variety of types. After being fired they were decorated with colors, a delicate rose, a clear blue, and with gold fillets. Most of these figures are taken from the life of the people, women and children in every sort of dress and attitude, artisans, master and pupils, vagabonds, actors and humpbacks. We note certain differences in the various types; those of Tanagra, for example, are not so slender and graceful as the products of the factories of Corinth, and the Athenians preferred religious and mythological subjects.

Summary. — After the death of Alexander, we see the beginning of the period called the Hellenistic. Ionian tastes predominate in architecture; nevertheless, the great Corinthian temple of Olympian Jupiter was erected at Athens. The excavations of Delos and Priene give us an idea of the Hellenistic cities with their colonnades, squares and market places. The houses all have an interior court. Most of the cities have a basilica with a library, a building for the municipal council and, most important of all, a theatre, usually out of all proportion to the size of the city itself. The largest theatres were those of Athens, Epidaurus and Syracuse. The temples are no longer arranged as before; in front of the *cella* there is a large vestibule. Pleasing anecdotal subjects predominate in sculpture, and personifications of cities, rivers and the like are substituted for the effigies of the old gods. Subject matter becomes more vulgar and in portrait sculptures a closer resemblance to the original is achieved. Various schools arose, each making its own contribution to Hellenistic Greek art. Up to the present time Alexandria has been noted for its landscape reliefs; Pergamum has been famous for its sculptures representing the battles of the Greeks with the Gauls, and for its great altar to Jupiter on which the combats of the gods and giants were portrayed. A theatrical school of art seems to have originated at Rhodes, which we know through the Laocoon, the Farnese Bull and the Muses of Philiscos. This division of the various styles of Hellenistic art into such schools is now believed to be too arbitrary; the same theme was often developed in various parts of the Greek world. Painting followed the general tendencies of sculpture; anecdotal subjects predominated and the lofty themes of the old art are now often treated in an ironical fashion. The development of ceramic art ends in the vases of Apulia, but cameos, glass work and coins achieve an excellence that is unsurpassed.

Bibliography. — W. Wiegand: *Priene,* 1904. — Pontremoli and Haussoullier : *Didymes,* 1904. — J. Schrammen and others: *Altertümer von Pergamon,* 1908. — Dorfeld: *Das Griechische Theater,* 1896. — H. Tiersch: *Pharos Antike,* 1909. — P. Cabbadias: *Fouilles d'Epidauros,* 1891; *Fouilles de Lycosura,* 1890. — J. N. Svoronos: *Das Athenische Nationalmuseum,* 1908. — J. J. Bernouilli: *Griechische Ikonographie,* 1905. — Th. Schreiber: *Die hellenistischen Reliefbilder,* 1894. — A. Hekler: *Greek and Roman Portraits.* — F. Hauser: *Die neuattischen Reliefs,* 1889. — F. Winter: *Hildesheimer Silberfund,* 1902. — A. de Villefosse: *Le Trésor de Bosco-Reale,* 1899. — F. Winter: *Die antiken Terracotten,* 1903. — A. Kisa: *Das Glas im Altertum,* 1908. — A. Furtwaengler: *Die antiken Gemmen,* 1900. — P. Gauckler: *Catalogue du Musée du Bardo,* 1904. — P. Arndt: *Griechische und Röm. Porträts,* 1891. — P. Pedrizet: *Catalogue des bronzes de la collection Fouquet,* 1911. — E. Pottier: *Les statuettes de terre-cuite dans l'antiquité,* 1890. — Homolle and Holleaux: *Explorations archéologiques de Délos,* 1909. — Bruckmann (Hermann): *Denkmäler der Malerei des Altertums,* 1912.

Fig. 598. — Head of Hipnos. *(British Museum.)*

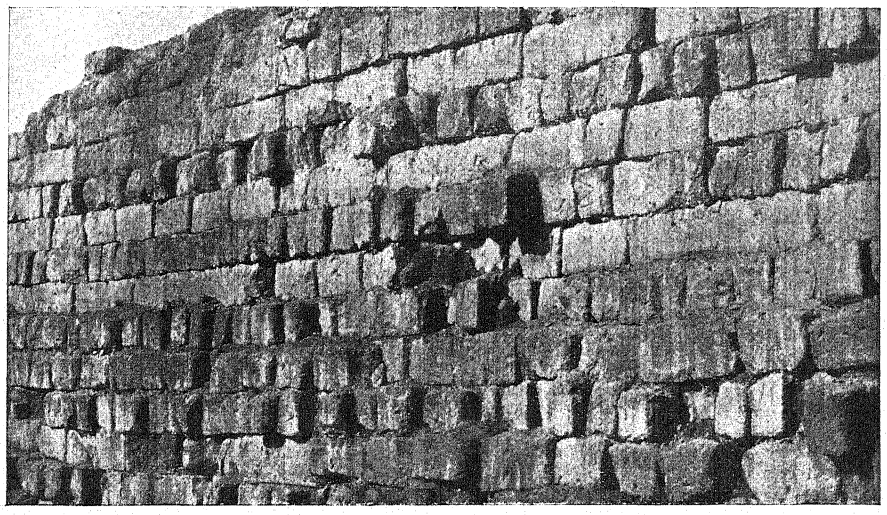


Fig. 599. — Roman wall dating from the period of the kings.

CHAPTER XVII

THE BEGINNINGS OF ROME. — EARLY LATIN SANCTUARIES. — EIRUSCAN ART.
TEMPLES OF REPUBLICAN ROME AND LATIUM. — BASILICAS.
BRONZE WORKERS. — THE HELLENISTIC SCHOOL OF CAMPANIA.

ONLY sixty years ago nothing was known of the existence of prehistoric man in Italy. When Mommsen began his History of Rome in 1850, he was able to state with entire accuracy: "Up to this time, nothing gives us the right to say that man has existed in Italy in a more primitive state than one which presupposes a knowledge of agriculture and metal-working. At all events, if the peninsula was inhabited by mankind in a more primitive state and prior to such a time, all relics of such a period have completely disappeared." Not long after these words were written the discovery of a prehistoric culture in Italy began. At present there is no richer field for the archaeologist nor one abounding more in surprising discoveries and hopes for the future than the remains of this primitive culture which existed in Italy before the dawn of historic civilization. Material for study is most abundant, from the most crudely shaped silex found in

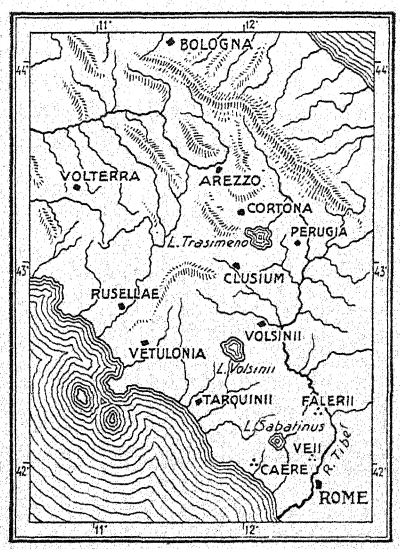


Fig. 600. — Map of Etruria.

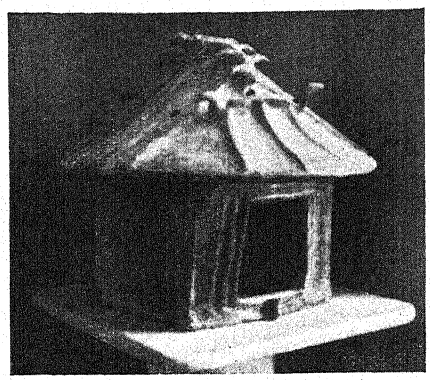


Fig. 601. — Cinerary urn of Latium in the form of a hut. *(Roman Forum.)*

every part of the peninsula down to the varied pictures we have of peoples possessing a well developed social organization and already in the highest stage of the neolithic period. One of the most interesting things about the prehistoric culture of Italy is that it is directly connected with the earliest historical civilization of Western Europe. Of all the countries of the Occident, Italy, and more especially Rome, are the only ones whose early history is covered by the literary tradition. Just as Egypt and Chaldea are the standards by which we determine the chronology of prehistoric times in the Orient, so does Italy of the period prior to that covered by written history furnish us with certain established dates, by the aid of which we are able to construct hypotheses useful to the study of the remains of the prehistoric remains of the other European peoples which grew up around her.

In Italy primitive man tatooed and painted his skin. The cranea found in the caves used for burials bear evidence of this fact, for they are stained with ochre and beside the skeleton is found a small jar of coloring matter employed for purposes of personal adornment. Instead of burial, cremation was later practiced, and the ashes were deposited in rude jars which were set at the bottom of pits which had been hollowed out of the rock (fig. 602). Graves of this sort are found in the important cemetery near Bologna called that of Villanova, where not only pottery but also various bronze objects have been found. Instead of the usual cinerary urns, small vessels in the shape of a hut are sometimes substituted, and the ashes were placed in these miniature dwellings, which were copied from those occupied by the deceased when alive. These hut-urns, as they are called, are very similar to the cabins still used by the wandering shepherds of the country about Rome. The ornamentation suggests the rude hut of logs and branches, the raised ridges of the roof representing the beams (fig. 601).

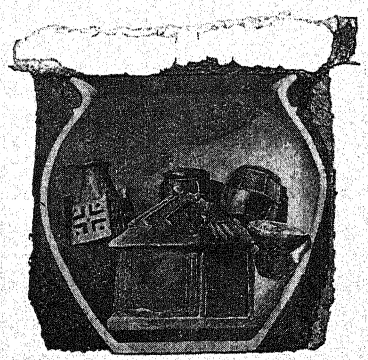


Fig. 602. — Pit-tomb containing urn and funeral objects.

On account of its location, the most interesting of these cemeteries is that discovered in 1902 beneath the Roman Forum. Here too, we find the pit-tombs and cinerary urns. Other isolated tombs had been found on the Quirinal at Rome, showing that the famous seven hills were inhabited in prehistoric times, long before the date fixed by the writers of antiquity as that of the City, namely 753 B.C. The discovery of this cemetery be-

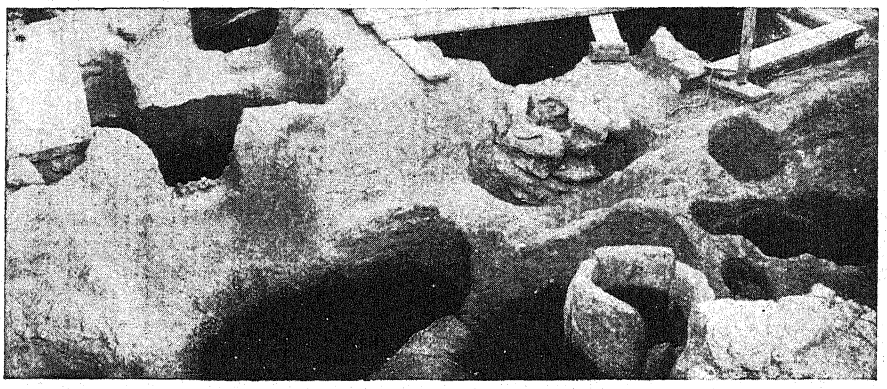


Fig. 603. — Prehistoric cemetery in the Roman Forum with pit-tombs.

neath the Forum, however, is still further reaching in the deductions which may be drawn from it. These are not merely isolated tombs, but form the common cemetery of a population which occupied one of the hills overlooking the valley of the Forum, probably the Palatine. Here it was, according to tradition, that the first settlement of the new city was made (fig. 603). The prehistoric pit-tombs of the Forum are unusually poor in funeral objects; the ashes of the deceased seem to have been left in the urn or terra-cotta hut together with other pottery, recalling the early Law of the Twelve Tables which proscribed ostentation in burial. The deceased appear to have been enterred without any other gold than that used for the teeth.

During this period when the people of central Italy were living in poverty in a state of neolithic culture, other tribes were settling in the north, in Lombardy and Emilia, who enjoyed a more advanced civilization. These were the so-called Terramara people, who dwelt upon wooden platforms supported by piles. This rather indicates that they came from a swampy country, but later, when they built their towns in hilly places where there was no longer any danger from floods, they still planted rows of piles in the ground to support the large platforms upon which their huts were set. These *terramare* can be traced by the remains of the piling and the vast quantity of kitchen refuse which had fallen beneath the platform. This accu-

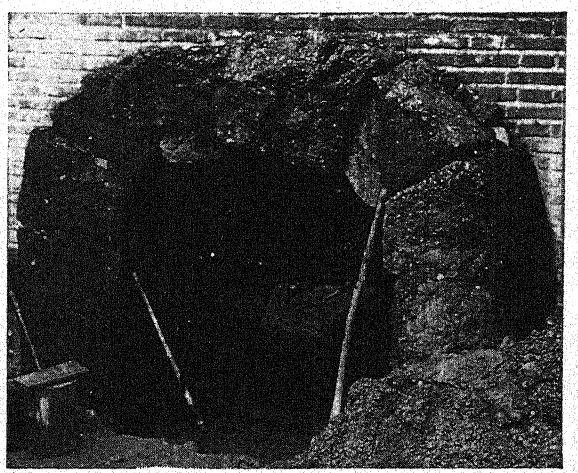


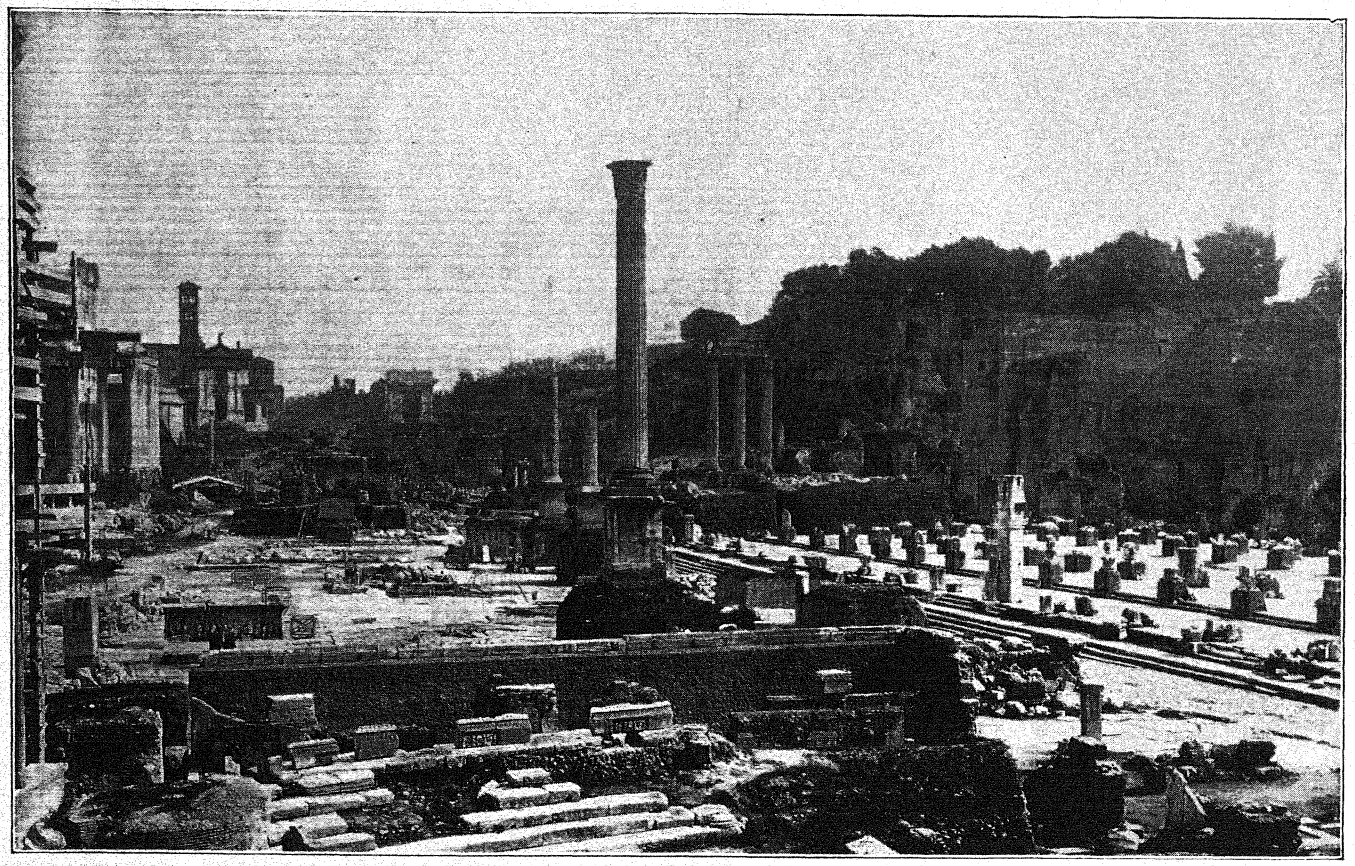
Fig. 604. — Branch of the Cloaca Maxima. Rome.

Fig. 605. — Walls at Norba. LATIUM.

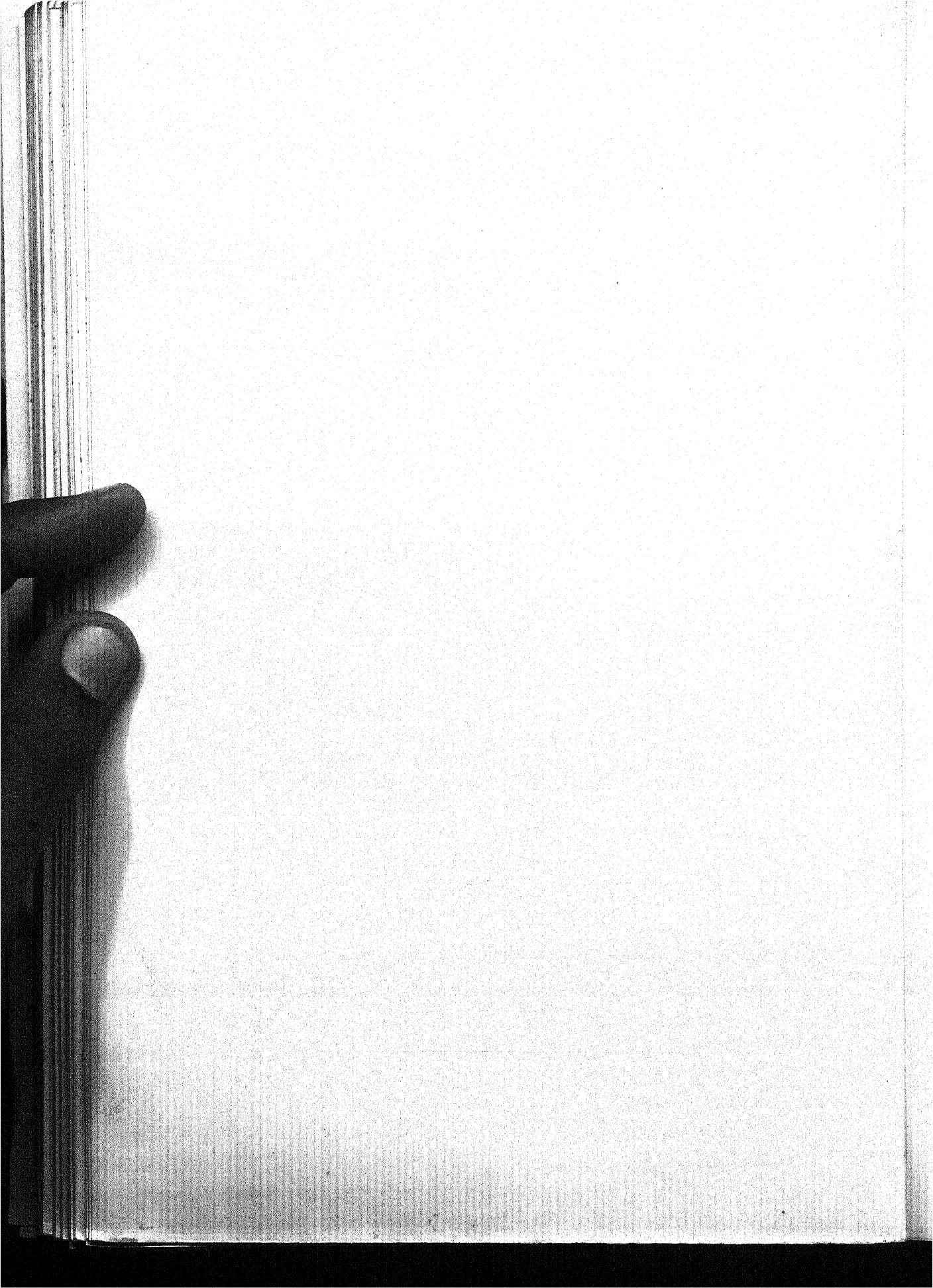
mulated in thick deposits in the course of time and forms today some of the most valuable material we have for archaeological research. The *terramare* were surrounded by a talus, or earthwork, which had a gate at the centre of each of the four sides of the platform. The platform was rectangular, or nearly so. The huts lay north and south, and east and west, in two wide streets. The study of their orientation in connection with astronomical conditions has led students to believe that the plans of these towns were laid out during the spring.

Such features as the regular plan and the two streets at right angles, which were also rules followed by the Romans in the building of their cities, have given rise to the theory that the Terramara people came down into central Italy and imposed their superior culture upon the primitive inhabitants of Latium. According to this hypothesis, the original inhabitants would become the *plebs*, and the later arrivals, the patricians. The latter always lived apart and formed a governing aristocracy. When they arrived, a real city was founded and it seems not unlikely that the coming of these invaders would later be commemorated by the legend of the foundation of Rome, the most important and far-reaching event in the entire history of Italy. These Terramara people had always lived under some sort of city government, and from a remote neolithic period they had been subjected to the discipline of living together in a rude city of clay and wood, so it is here that the civic origins of the Romans are to be sought, with their undeniable aptitude for governmental administration.

It must be admitted, however, that it seems rather strange that the Terramara people learned in Latium to construct the great stone walls with which they surrounded their cities. These cities were still rectangular like the early enclosure on the Palatine. This hill, afterward entirely occupied by the Palace of the Emperors, still furnishes evidence in the lower layers of accumulated soil of the occupation of the primitive inhabitants of Latium and of the later arrivals whom we believe to be the Terramara people. Here the patricians dwelt and here were located a number of very ancient temples which were built in the form of a hut. Some of these, among them the so-called House of Romulus, were preserved until a comparatively late period. Beneath the foundations of the palaces of the Emperors, which were superimposed upon the remains of the patrician houses of the Republic without entirely destroying them, and below the



ROME. Valley of the Forum viewed from the Capitoline. To the left, the Esquiline, and to the right, the Palatine, with the Velia in the background.



latter as well, we find some very ancient circular structures built of hewn stone blocks. These may have been built for religious or funeral purposes like the structures of the same type as the tomb of Atreus belonging to the Mycenaean civilization.

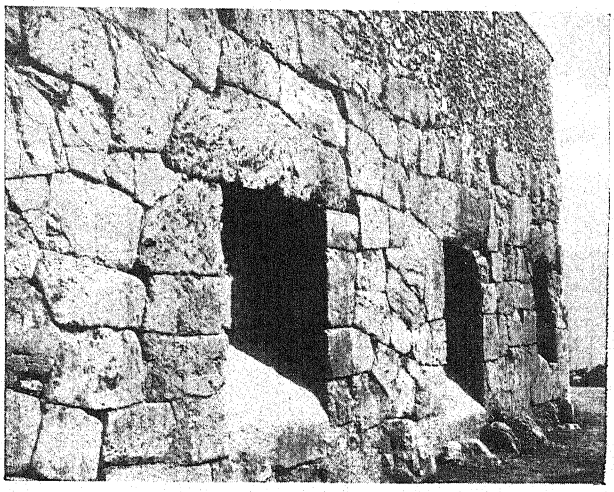


Fig. 606. — Walls of the Latin acropolis of Aletrium.

The valley of the Forum lay below the Palatine and was still outside the city during the early period of Roman history. Later on, in the time of the emperors, when the Palatine was covered with magnificent palaces, there was a gate near the Forum from which an incline led down into the valley. This was known as the Porta Mugonia, for according to tradition it was here in early times that the cattle were taken down to be watered at the ponds which had not yet dried up. (Plate XLIX.) The Forum doubtless continued to be used as a cemetery, for recent excavations have laid bare the famous Tomb of Romulus mentioned by the writers of antiquity. To insure its preservation it had been covered by a handsome black stone, the *niger lapis*. Below this stone and covered with fragments of building material, a singular burial monument was found. It had two bases which are supposed to have supported two lions; there was an altar in the middle and a stela on one side bearing a Latin inscription. This inscription is so ancient that, even when it can be made out, only a few words can be deciphered. This royal tomb, said to be that of Romulus, surely dates from the period of the great work of laying out the city. This is ascribed to two men who may be purely legendary characters, the kings Servius Tullius and Tarquinius Priscus. They were of Etruscan origin and symbolize the Etruscan influence which seems to have dominated

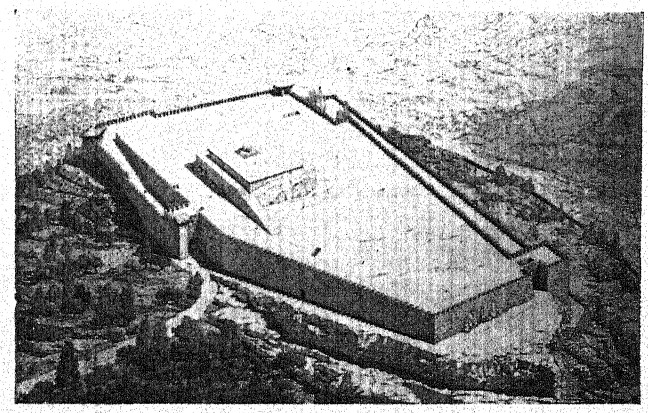


Fig. 607. — Restoration of the acropolis of Aletrium.

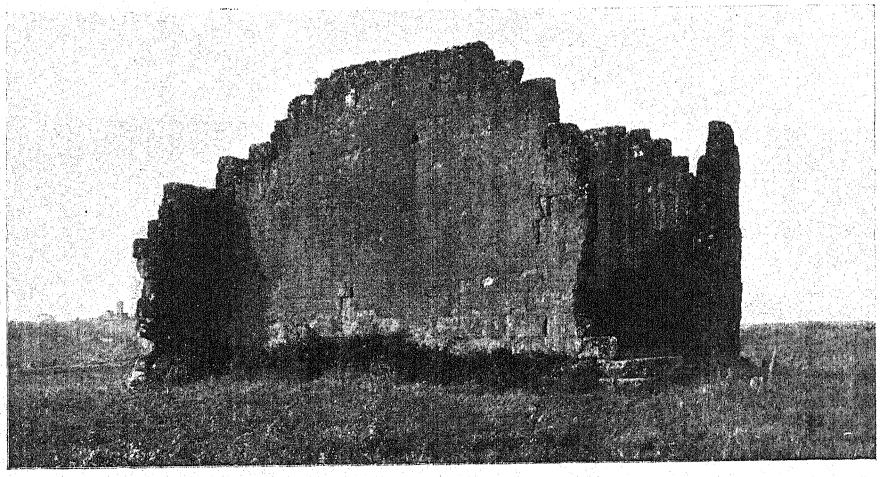


Fig. 608. — Ruins of an early Latin temple. GABII. *(Delbrück.)*

Rome during a considerable period. We shall study the Etruscans a little further on, but for the present we will examine the earlier public constructions. The walls of the little city on the Palatine were first enlarged by Servius Tullius. This wall of massive stone blocks, many portions of which are still standing, included some of the other hills as well. The wall was laid in alternate courses of headers and stretchers (fig. 599). The construction of the first drainage system was also begun about this time. To Servius Tullius is ascribed the Cloaca Maxima, which still receives all the water from the valley of the Forum along all its course (fig. 604). Not only Rome but also a number of other Latin cities were enclosed within massive walls. This was long supposed to be the work of the Pelasgians and other ancient Mediterranean peoples, but today, although we still remain in ignorance concerning the primitive inhabitants of Italy, we no longer claim so great an antiquity for these remains. The famous Cyclopean walls of Norba, an abandoned city of Latium, have been found in the course of their excavation to be set upon a layer of earth containing fragments of pottery dating from a comparatively late period (fig. 605). It is evident therefore that these walls are not Pelasgian, nor do they date from a mysterious prehistoric period, but on the contrary they are contemporary with the Roman walls of Servius Tullius. So we see that a number of other city-states grew up in the neighborhood of Rome which were also enclosed within walls of hewn stone of more or less the same type.

Other walls, like those of Aletrium, are composed of polygonal stone blocks. These formidable ramparts appear to have enclosed a sort of religious acropolis with a temple and a small *cella* on its summit which overlooked a large part of Latium (figs. 606 and 607). It was probably very similar to the famous sanctuary of Praeneste (now Palestrina), where worship was still carried on in the temple of Fortuna during the period of the Empire. In the Latin temple at Gabii we see a *cella* already of large dimensions and constructed of rectangular blocks of stone like those of the early walls of Rome. Its commanding situation upon a hill

lent itself to a series of terraces where the people could assemble in large numbers (fig. 608). Thus from the very beginning, we see Rome taking the place which she has always taken throughout her history. The Latin demanded large open spaces for his organized worship and occasions of public display, where he and his kind could assemble in great numbers.

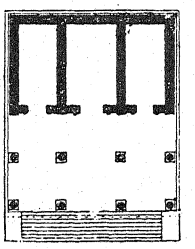


Fig. 609. — Plan of the early temple of the Capitoline.

From the foundation of the city, the Capitoline seems to have been a religious acropolis. The hill was separated from the rectangular city upon the Palatine only by the valley of the Forum. It was fortified by the Etruscan kings and its double summit was occupied by a temple and a citadel. The temple of the Capitoline was rebuilt a number of times and, as we shall see, continued to be highly venerated and the principal centre of Roman worship down to the historical period. It has been described repeatedly by the ancient writers, who considered it the most holy spot in ancient Rome. From the very first, it consisted of three separate *cellae* in which the three great deities were worshipped. These were Jupiter, Juno and Minerva, the Capitoline triad and the patron deities of the Roman people (fig. 609). The temple had a double portico faced with four columns which were more widely spaced than in the classical Greek temples. The cornice was ornamented with complicated acroteria, and the pediments bore groups of terra-cotta statuary. Worship on the Capitoline began in the earliest times and may indeed have originated before the period of Etruscan influence, but the definite aspect of the temple itself was acquired at the time of its first restoration, made at a time when Rome, from an artistic standpoint at least, was still under the tutelage of the Etruscans. When the old building was burned in the reign of the Antonines, in spite of its many restorations these emperors respected its primitive arrangement of three *cellae* with corresponding doors and widely spaced columns, when they rebuilt the structure (fig. 610).

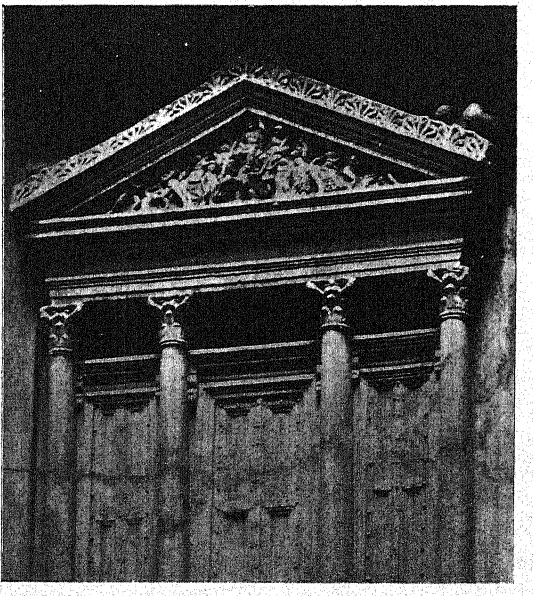


Fig. 610. — Temple of the Capitoline as rebuilt during the Roman Empire. *Relief on the Arch of Marcus Aurelius.* ROME.

We shall now make a study of the Etruscans. As we have already seen, these people exerted a great influence upon the spiritual and artistic

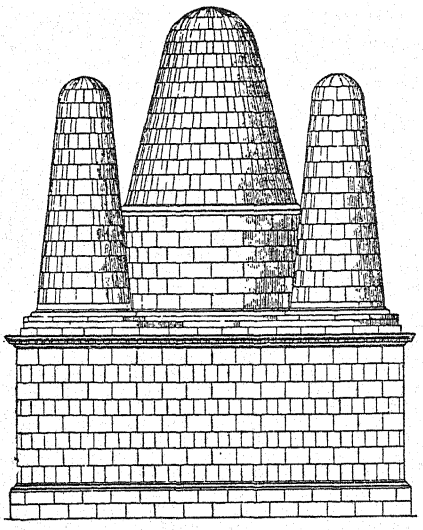


Fig. 611. — Etruscan tomb. ALBANO.

development of the Romans from the earliest times. The Etruscans were of a different race from the other ancient tribes of Italy. Historians agree that they arrived in the peninsula some time during the 9th century B.C. at a time when they had already attained an advanced state of culture. Herodotus explicitly states that they came from Asiatic Greece. After sailing past many lands they came to the land of the Umbri, "where they still dwell and have their cities to this day." This statement has given rise to the belief that they emigrated from the coast of Ionia and came by sea to the Mediterranean shore of central Italy, about where Tuscany now is, and where in former times their principal cities were located. These Umbri mentioned by Herodotus were probably the primitive Italic peoples, the inhabitants of Latium and possibly the Terramara invaders as well (fig. 600). Be that as it may, the confederation of Etruscan cities constituted a state which proved itself superior to all the neighboring nations. We have already seen how strong an influence they exercised upon the inhabitants of Rome and Latium to the south. To the east, they crossed the Apennines and established colonies on the Adriatic coast, among them the city of Felsina, now Bologna. On the sea they frequently measured their strength with varying fortunes with the Phoenicians and with the Greeks of southern Italy. The Etruscans were always a maritime people, inheriting the tastes, superstitions and mental habits of the ancient peoples of Ionia. They adopted various modes of burial, but their most ancient and most characteristic practice was that of placing the remains in chambers carved from the rock, on the outside of which they carved reliefs in imitation of façades similar to those of certain tombs of Lydia. Instead of hol-

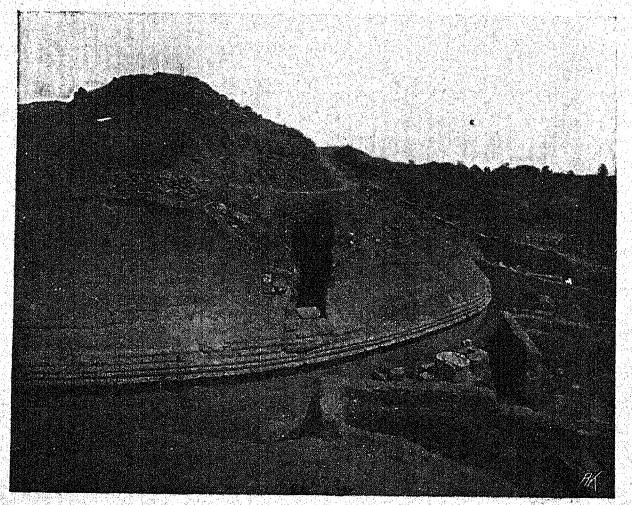


Fig. 612. — Etruscan tomb covered by a mound of earth. CAERE.

lowing a tomb out of the rock, they sometimes heaped up a tumulus of earth over a large stone base which was ornamented with mouldings. These tumuli also recall the colossal tombs of Lydia; one of the latter, that of Alyattes the father of Croesus, is still standing near Sardis. The most famous of the tumulus type is that called the Tomb of the Horatii and Curatii at Albano not far from Rome (fig. 611). A number of Etruscan tombs of this type have also been found at Caere where they overlook a great ancient cemetery (fig. 612).

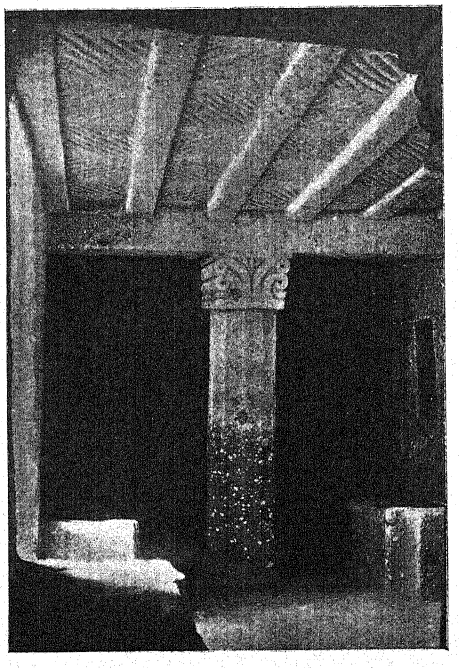


Fig. 613. — Chamber of the Columns. Etruscan tomb. CORNETO.

In both the tombs carved from the solid rock and those covered by a mound of earth the ceiling preserves the form of a wooden structure, and the stone has been carved in imitation of a beamed ceiling (fig. 613). This is an important factor in establishing the connection between these Etruscan tombs and those of Lydia as well as a confirmation of Herodotus' statement regarding the Asiatic origin of the Etruscans. Down to the time of Tiberius they were still well aware of this, and many traces of their

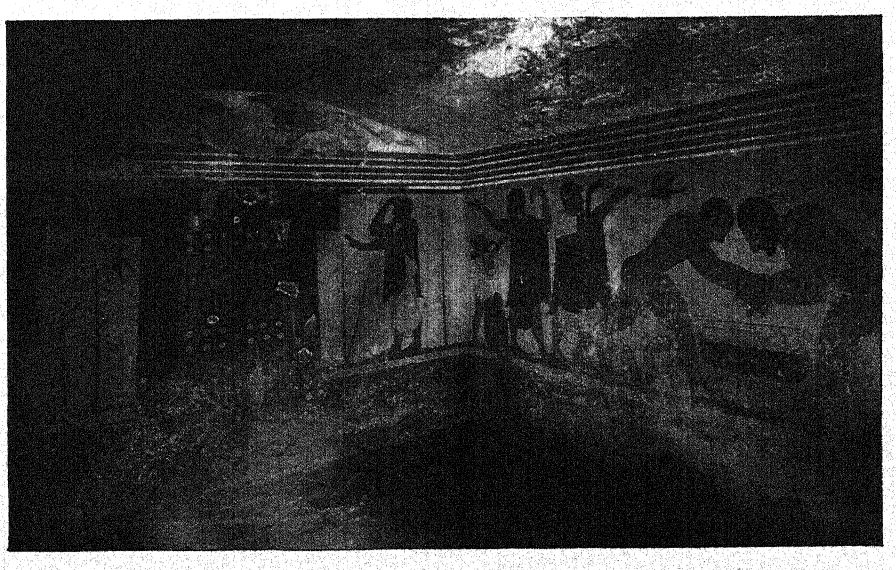


Fig. 614. — Burial chamber of an Etruscan tomb. CORNETO.

Fig. 615. — Etruscan sarcophagus of terra-cotta. *(Villa Giulia.)* ROME.

Asiatic origin still existed in their dress, customs and traditions. The Etruscan tombs were usually ornamented with frescos on the walls of the large chambers (fig. 614). We find in these subterranean rooms friezes of figures, often in a surprisingly good state of preservation. The chronological sequence of Etruscan art presents all the styles which the Greeks are supposed to have employed in their mural decorations. It is all imitated in Etruria, the parallel bands portraying a succession of small figures, larger compositions of dark colors in silhouette, and finally frescos in bright colors like those of the school of Polygnotus and his pupils

There are pictures of gladiatorial combats, athletic contests, chariot races and battles. Even architectural ornaments are painted on these walls, such as friezes, doors and pilasters. The tomb is really a subterranean home containing as far as possible an animated record of every aspect of life in their cities.

The bodies were deposited in niches hollowed out of the wall, or else in sarcophagi of terra-cotta or stone. The terra-cotta sarcophagi appear to be the older and are shaped like a Greek couch. They are supported by four legs ornamented with volutes and palmettes of Ionian design. Upon the lid was a representation of the deceased who was usually a fleshy phlegmatic type of person. Often husband and wife are represented together, united in the life beyond the grave (fig. 615). Later, the Etruscan sarcophagi were carved from stone and ornamented with reliefs. The subject matter of these reliefs is frequently Greek, but it is interpreted in a spirit all their own, which is vigorous and often cruel. Other types also appear which are unknown to the art of Greece, such as winged beings who open the door of the tomb and arrange it to receive the body of the deceased. They accompany the body and take it from the arms of the parents and relatives who take leave of the loved one (figs. 616 and 617).

Fig. 616. — Etruscan sarcophagi from Italy. *(Museum of Barcelona.)*

These winged beings bear lighted torches and small curved horns in their hands. They are often androgynous types of unusual beauty and remind us of the angels of Renaissance art. Their sole function seems to be that of accompanying the souls of the departed. They sit on guard at the door of the tomb and

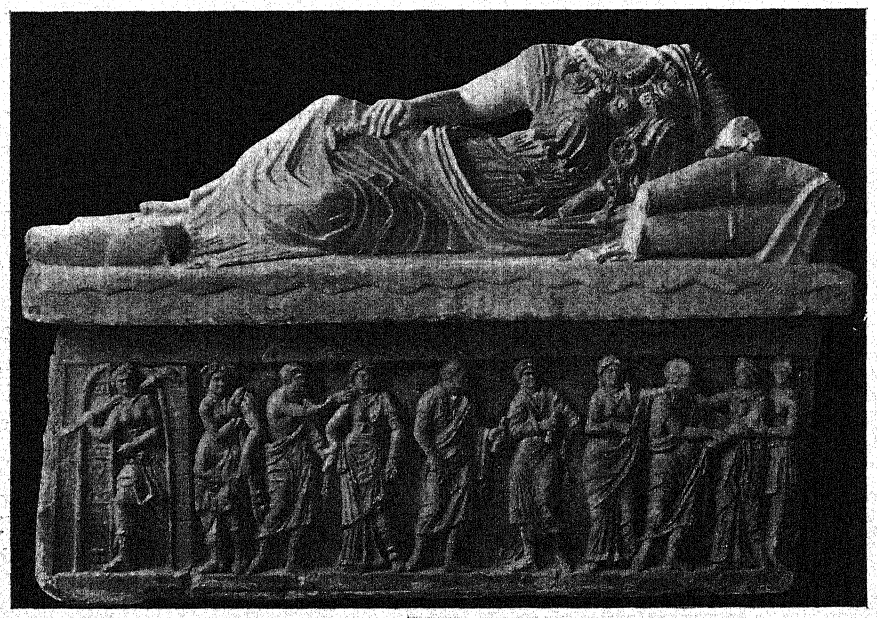


Fig. 617. — Etruscan sarcophagus. *(Museum of Palermo.)*

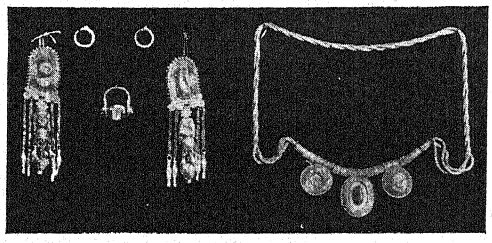


Fig. 618. — Etruscan jewelry. *(Villa Giulia.)* ROME.

ward off any violation of its sacred peace.

The sculptured figures resting upon the lids of these sarcophagi are dressed in long robes of rich fabric like those of Asiatic Greece. Both men and women are loaded down with jewelry, wearing handsome necklaces and bracelets which are often of exaggerated form (fig. 617). The jewels found in these tombs are the finest specimens of the goldsmith's art that have come down to us from antiquity. There are necklaces with pendants, earrings set with pearls and other precious stones, and fibulae of filigree work (figs. 618 and 619). A careful study of this jewelry shows that the technique is not only Greek, but unmistakably Ionian as well. Either because of close trade relations or through development along parallel lines, the Etruscans still followed the methods of the Oriental artists in their gold work for many centuries after their arrival in Italy.

The Etruscans maintained constant commercial relations with Greece, especially with the cities of Ionia from which they believed themselves to have come. They consequently never lost their Hellenic culture in spite of their long residence of many centuries in Italy. It should be noted, however, that it was not the Hellenism of classical Greece, which was semi-Doric in character, it was the Oriental Hellenic culture of the Asiatic Greeks of Lydia and Phrygia. The Etruscans imported large quantities of the painted ceramic ware of Greece and also imitated it in their local potteries as well. They probably imported no more Greek vases than many other civilized nations of antiquity, but the fortunate circumstance that they paid so much attention to funeral rites and were accustomed to provide the dead with so many valuable jars and vases has made Etruria the richest source we have of Greek vases until recently. Suffice it to say that prior to the excavations undertaken in Greece, Greek vases ornamented with painted figures were called Etruscan vases. In spite of the Greek inscriptions and signatures which they bore, the enormous quantity found in Etruria led to the belief that they were manufactured in that country. Even yet it may be safely said that nine tenths of the painted vases in the collections of Greek

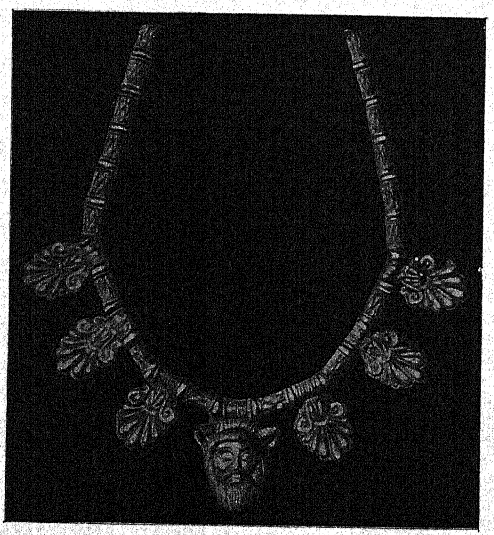


Fig. 619. — Etruscan necklace. *(Villa Giulia.)* ROME.

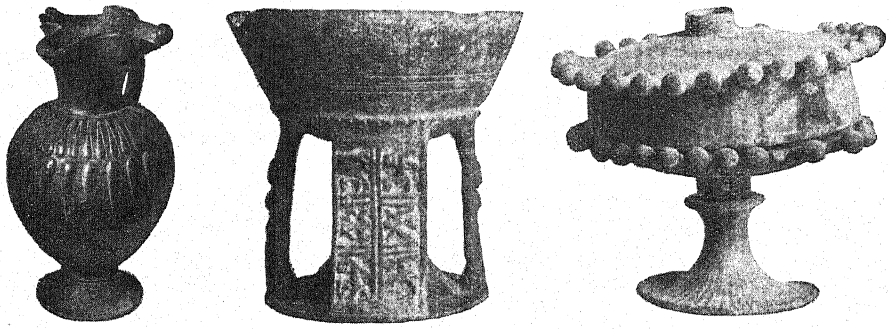


Fig. 620. — Pottery called *buchero nero*. BOLOGNA.

ceramics in the European museums were found in Italy in the cemeteries of Etruria. We find examples of every style, from the geometric pattern dating from the first years of their occupation of Italy down to the vases ornamented with black and white figures. Some magnificent specimens have been found in the Etruscan tombs, among them the vase called the François, which has been reproduced in this volume as one of the finest examples of archaic Greek ceramics now in existence, to say nothing of many others signed also by great artists.

There is no doubt today that by far the greater number of these vases of Greek style found in Etruria came from Greece, especially from Athens. Not only have vases been found in Greece which are known to be the work of the same artists, but also inscribed stones and many other indications have been found showing that these signed vases were made in Athens. The number of vases painted in the Greek style which are local imitations is not so great. In these the Etruscan artists introduced subjects taken from their own mythology, such as evil spirits and the winged beings. Generally speaking, however, the subject matter is apt to be the same as that presented on the genuine Greek vases. There are scenes from the Trojan war, the battles with the Amazons and scenes from the life of Achilles, but always done in a spirit of their own showing an

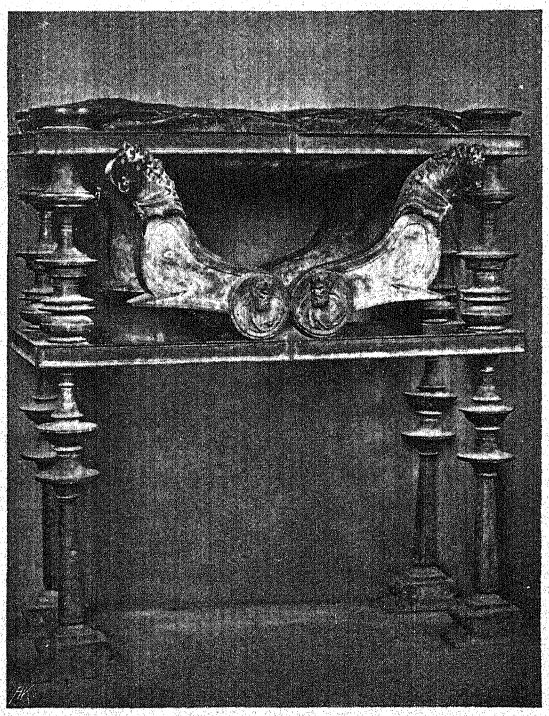


Fig. 621. — Bronze Etruscan couch.

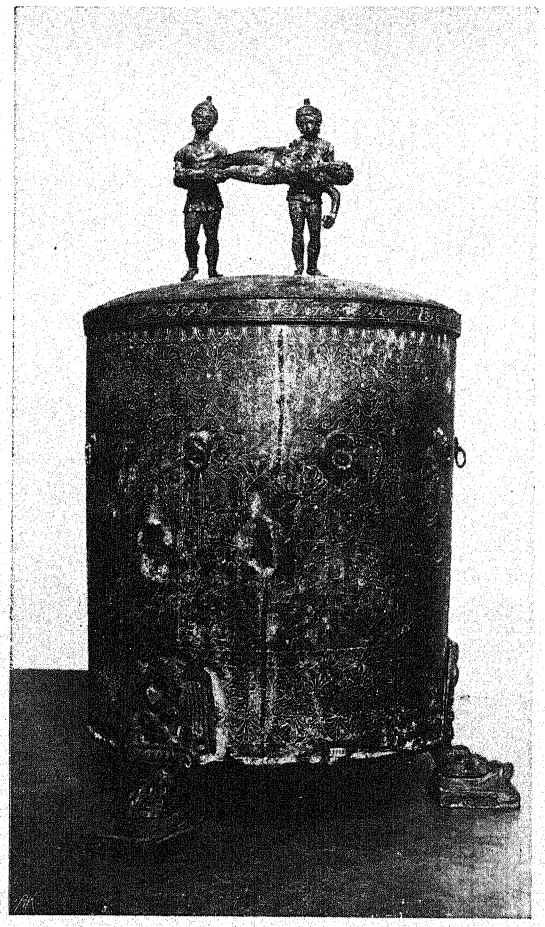


Fig. 622. — Engraved Etruscan cist. *(Villa Giulia.)*

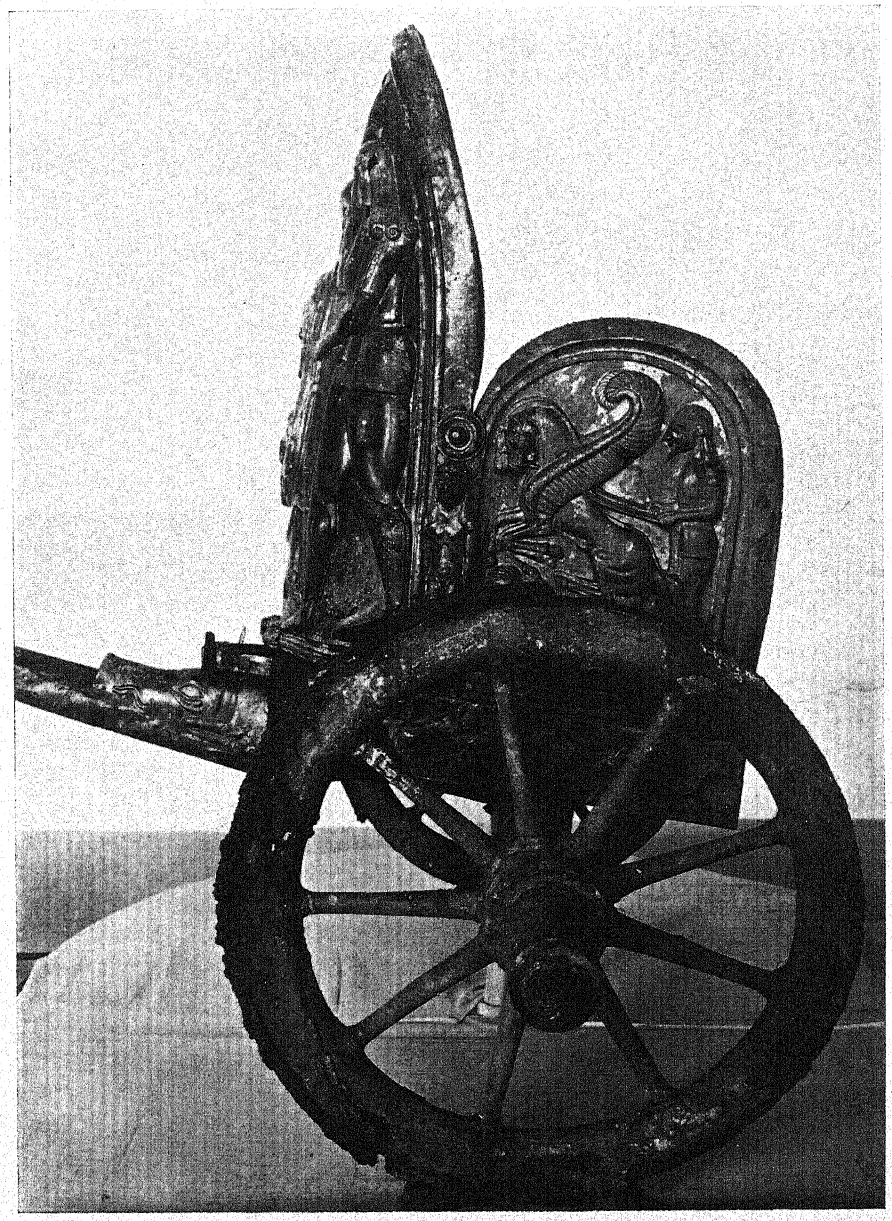
exaggeration of expression and a taste for cruel and violent gestures which reveal the psychology of these Etruscan artists as well as that of their public.

The Etruscans also had a technique of making pottery which was all their own. This ware was entirely black and the ornamentation was stamped in relief. This is called *buchero nero* (fig. 620), because the paste of which it is made is strongly impregnated with charcoal smoke. These vases were evidently smoked after firing.

This *buchero nero* ware was made in imitation of metal objects such as little stoves, jars and cups. They even made chains of terra-cotta. In spite of their fragility these also formed part of the funeral equipment left in the tomb. Besides the terra-cotta imitations, the metal objects themselves, done in repoussage, are also found. The Etruscans had an especial aptitude for this work which they retained up to the Roman period. The large chambers of the tombs which have been excavated have been filled, often crammed, with bronze jars ornamented in relief, war chariots, bronze insignia set upon a frame-work of wood, and beds and chairs of cast metal parts. (Plate L.)

The sarcophagi in these chambers were found to be surrounded with metal objects. Some were articles of pomp and luxury, while others were those used in daily life. The wealth represented by these funeral offerings consisted largely of bronze. Indeed, this nation of small, fleshy, phlegmatic men showed unusual ability in the quality of metal work which it produced.

The beds, which could be folded up, were supported by long turned metal legs; the mattress rested upon bacchic asses ornamented with medallions which are quite typical. Often the bronze articles are not cast, but are of repoussé work. These people were also specialists in the art of etching or engraving fine line drawings upon articles made of thin copper plates. This was not unlike the



Etruscan chariot discovered in Monteleone in 1907. *(Museum of New York.)*

Damascus work of today. Their method of engraving was to cover the copper surface with wax or bitumen. The design was then incised with a stylus and when the object was immersed in an acid bath, only that portion was affected from which the wax had been removed by the engraving tool.

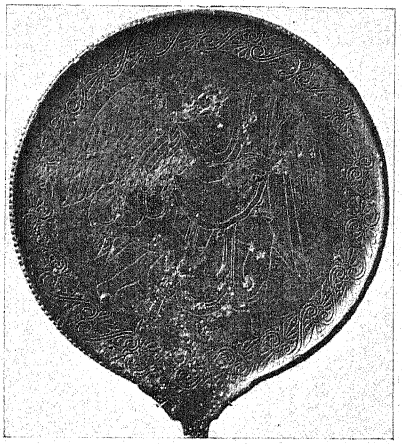


Fig. 623. — Etruscan mirror. *(Villa Giulia.)* ROME.

The Etruscan tombs have yielded an enormous quantity of metal articles engraved by this acid process. The handsomest of these are the little toilet-boxes called *cistae*. They are made in the form of a cylindrical casket and were used by the Etruscan ladies to hold their toilet articles (fig. 622). They are ornamented with an engraved border both above and below, and between we see the same mythological subjects as those depicted in the monumental Greek paintings which had a world-wide reputation at that time. It seems not unlikely that the makers of these Etruscan *cistae* handed down their designs from generation to generation as a shop tradition, for we frequently see that in soldering the engraved plates, a portion of the composition has been destroyed through ignorance of its meaning. The Etruscan artists also introduced subject-matter of their own into this engraved work, for we also find the characteristic demoniacal personages, the winged beings and the funeral rites with their poetical interpretation of death in the manner peculiar to this people. Their mirrors consisted of plates of fine polished steel and were decorated on the back with acid engravings (fig. 623).

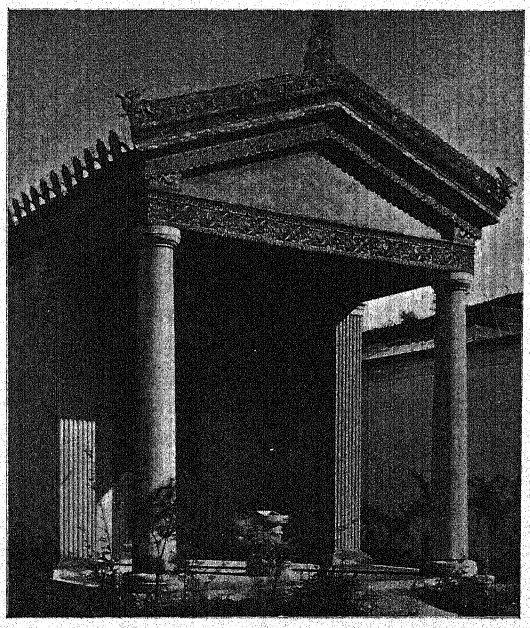


Fig. 624. — Restoration of the Etruscan temple at Faleria. *(Villa Giulia.)* ROME.

We have described the architecture of the Etruscan tombs, their furniture and the funeral objects such as vases, jewels and bronze articles, because we may thus most readily obtain some knowledge of this remarkable peo-

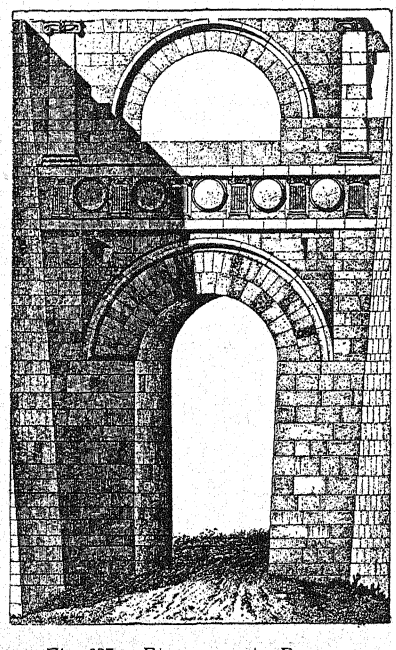


Fig. 625. — Etruscan gate. PERUGIA.

ple who lived in the region of central Italy bordering on the territory of Rome. Although the tombs and the objects which have been preserved in them may represent the most brilliant features of Etruscan civilization, their art was by no means confined to funeral architecture and the things pertaining to it. Their religion required temples as well, and these were dedicated to the principal deities of the Greek Pantheon, especially to the great triad of Jupiter, Juno and Minerva, who were also the patron gods of the Capitoline at Rome. Vitruvius, an architect and writer of books on architecture of the time of Augustus, describes the Etruscan temple and points out the manner in which it differed from the Greek temple. The *cella* was enclosed in the rear of the temple and the opisthodomos and rear portico were lacking. There was a portico in front and its columns were more widely spaced than was the custom among the Greeks. This was because they supported an entablature of wooden beams ornamented with a covering of painted terra-cotta which was nailed to the wood beneath (fig. 624). The capital was derived from the Doric capital, but instead of the elaborately curved moulding or echinus, its curve consisted merely of the arc of a circle. The column had a small base. The most prominent characteristic of the Etruscan temple was its extremely wide intercolumniation. A temple was discovered in Faleria of which it was possible to make a complete restoration. Here we see that only two columns were employed to support the horizontal beam with its terra-cotta covering. We find the usual features of the upper portion of the Greek temple in the Etruscan, but they were mostly made of terra-cotta and are excessively large. This is true both of the acroteria of the pediments and of the pieces used to close the ends of the channels between the tiles. This elaborate crest of the Etruscan temple brightly painted in red and ochre gives the structure an aspect all its own which is most expressive of the psychology of this half-Greek, half-Oriental Italian nation.

They also constructed many great public works, such as walls, aqueducts and monumental gateways. Here, too, they show themselves to be the descendants of the Asiatic Greeks. In this connection it should be noted that at the time of the great discoveries in Etruria (from 1824 to the middle of the century), the Greek cities of Asia Minor and Lydia were still comparatively unknown and these resemblances passed unnoticed. It was known through the literary sources that Polycrates, the tyrant of Samos in Ionia, had tunneled through a mountain in order to construct a long aqueduct to bring water to his city, but it was only

Fig. 626. — Temple of Cori. LATIUM.

recently that this subterranean aqueduct has been identified. Now that we are familiar with this work as well as other water-conduits of Asiatic Greece, the resemblance between them and those built by the Etruscans in Italy is readily recognized. A large number of the hydraulic works of Latium are also ascribed to these people, especially the tunnels constructed in order to drain lakes and the drainage-canals. It has already been noted that the Cloaca Maxima at Rome is one of the works believed to have been constructed by the Etruscan kings. These covered channels were cut out of the rock where it was sufficiently firm, but where the earth was soft, they were covered with semicircular vaults constructed of wedge-shaped blocks of stone. For this reason, before the discovery of arched vaults in the Orient, in Chaldea and Assyria, the Etruscans were credited with being the great engineers of antiquity who discovered the principle of the arch. This of course is no longer believed to be the case, but there is, nevertheless, a certain basis of truth in this too naive theory. It was not the Etruscans of Italy who invented the arch, but rather their Asiatic ancestors, or the neighbors of the latter in Mesopotamia. In any case it was the Etruscans who brought this great invention to the knowledge of the early Roman architects in whose hands it came to have such far-reaching results.

All this gives us some idea of the extraordinary interest which was awakened at the time of the discovery of the Etruscan city gates with their semicircular arches admirably constructed of stones shaped for that purpose. These gates in the Etruscan walls are very ancient. One at Volterra, with three heads ornamenting the archivolt, is reproduced on an Etruscan sarcophagus which dates from the fifth century B.C. at least. They evidently took great pride in the reliefs on the gates of their cities. One of these, the Porta Marzia at Perugia, is surmounted by a frieze representing a balcony with figures on it. On another of the Etruscan gates of Perugia we see a frieze which is typical. It is composed of Ionian pilasters which are employed much like triglyphs, and disks or shields are set in the spaces between them (fig. 625).

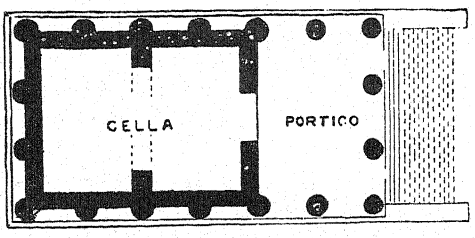


Fig. 627. — Plan of the temple of Fortuna Virilis (so-called) at Rome.

Nevertheless, Etruscan art did not produce one monumental work of outstanding merit, such as we have seen to be the case with almost every other civilization of antiquity. Their bronzes, vases, reliefs, tombs and walls are admirable, but we can not compare these with the great temples or colossal tombs of other ancient nations. They were a branch of an Asiatic race wrenched from the parent stem, and their mission in the world was that of preserving the spirit of Ionia in the western Mediterranean world and of inspiring with the ancient tradition of eastern Hellenism the art of that new mother of nations, the Roman Republic.

Rome profited greatly by the lessons taught her by her Etruscan neighbors. At first the Romans depended entirely upon the Etruscans for their art and their architects never forgot the technique which they learned from this people. A new Hellenic influence was soon felt, however, but this time it came from the south. This was the Alexandrian art which had invaded Campania. A large number of the great patrician families of Rome had lands and country homes on the Gulf of Naples, where they came into touch with Hellenistic art and customs. Pozzuoli, the ancient Puteoli, was a colony of Alexandria and received much of the overflow of the great metropolis. To this city came famous comedians, dancers and artists from Alexandria. From Pompeii more than any other city do we learn what Alexandria must have been. As has already been said, although the results of archaeological exploration in Alexandria have been insignificant, we find in the Pompeiian frescos innumerable subjects taken from the valley of the Nile, and the small bronzes and

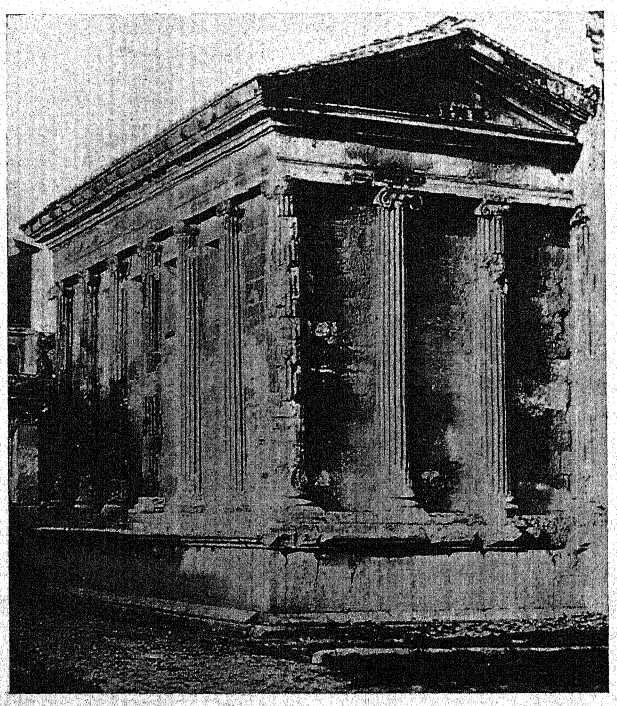


Fig. 628. — Temple of Fortuna Virilis at Rome.

figurines of Pompeii may be copies of Alexandrian models.

Rome, with her austere republican traditions, attempted to resist this invasion of the licentious customs and sensual artistic themes of Alexandria, but long before the time of Augustus the Roman patricians became the possessors of large collections of pictures and statues reflecting the culture of the east. The conquest of the generals of the Republic in the Orient, the capture of Corinth and Syracuse, yielded enormous quantities of plunder, much of it consisting of works of art, which contributed to the artistic education of Rome. Nevertheless, few of the buildings and sculptures of the period of the Republic are still in existence. The great city was practically rebuilt from top to bottom by the emperors who were ambitious to immortalize their names and win public favor by means of a lavish building program. The same is true of the cities of Latium. The Doric temple of Hercules at Cori is still preserved (fig. 626). Its tall graceful columns and the plain mouldings of its entablature are perfectly in accord with the lighter character assumed by the Doric order in Ionian lands in the second century B.C. Its front portico, with four columns on the façade, was roofed with wood and the projecting stone blocks which supported the beams are still to be seen. It was much more spacious than the portico of the ordinary Doric temple. Etruscan influence and that of the Hellenistic art of Asia Minor are to be seen in every detail of this temple at Cori.

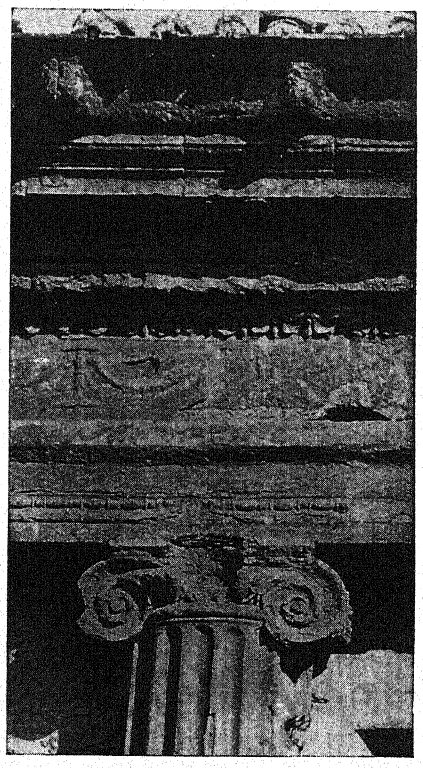


Fig. 629.—Detail of the temple of Fortuna Virilis at Rome.

In Rome itself the so-called temple of Fortuna Virilis has been preserved almost intact. This, too, surely dates from the period of the Republic. It has been somewhat disfigured by enclosing its front portico in order to transform it into a church (figs. 627, 628 and 629). It is pseudoperipteral, that is, instead of being completely surrounded by a peristyle, only semidetached columns are carried round the walls of the *cella*. The columns of the portico were completely detached, but they are now incorporated in the modern wall which disfigures the structure. The capitals of the columns are Ionic and curved palmettes project from the volutes in precisely the same manner as those of the temple of Priene, the details of which are reproduced in figure 530. If the various features of these buildings be compared, it will be readily seen that both show the influence of Hermogenes, an architect and writer of Asia Minor whose works

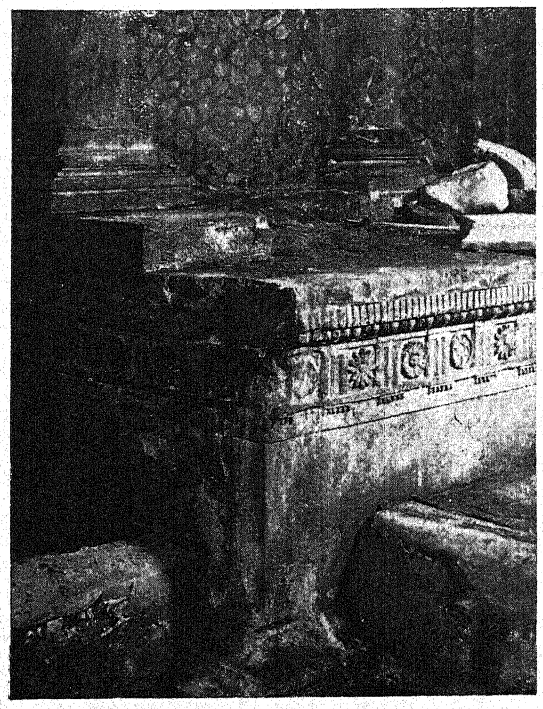


Fig. 630. — *Podium* of the temple at Palestrina. LATIUM.

were copied by Vitruvius. Not far from the temple of Fortuna Virilis the remains of two other ancient temples have been discovered. They were on the old Forum Boarium and their great bases are still to be seen. All three were set on high bases like that of the temple of Fortuna Virilis, a traditional feature of many of the Etruscan temples as well. Such a base was called a *podium* and it supported the entire temple. This is a genuinely Latin feature and one of the most original of those preserved in the later temples of the Imperial period, for these also were set upon a great base with a stairway in front which ascended between two walls.

As a usual thing, the only ornamentation of the *podium* was an upper and lower moulding, as in the case of the temple of Fortuna Virilis (fig. 628). Sometimes, however, they also added a frieze. This was divided by

Fig. 631. — Sarcophagus of Lucius Cornelius Scipio Barbatus. *(Vatican.)*

triglyphs, and conventionalized roses were set in the compartments between them corresponding to the metopes. This design is very similar to that on the frieze of the gate at Perugia (fig. 625). We see the same thing on the Etruscan sarcophagi and the funeral monument from the tomb of the Scipios now in the Vatican (fig. 631). If we compare this sarcophagus of one of the Scipios with the frieze on the *podium* of the famous Latin temple at Palestrina (fig. 630), we see that in spite of the repetition of the same motif and the poverty of the design, these decorations of the period of the Republic produced a very fine effect through their good proportions and well ordered arrangement. The temple at Palestrina was a famous sanctuary with a lateral court, but it is so completely destroyed that its general arrangement can only be made out with considerable difficulty. A few details survive, such as the capitals of the columns, which are Corinthian. The Corinthian style was also employed in the round temple at Tivoli. This is called the temple of the Sybil, but was dedicated to Vesta (fig. 632). The capitals are interest-

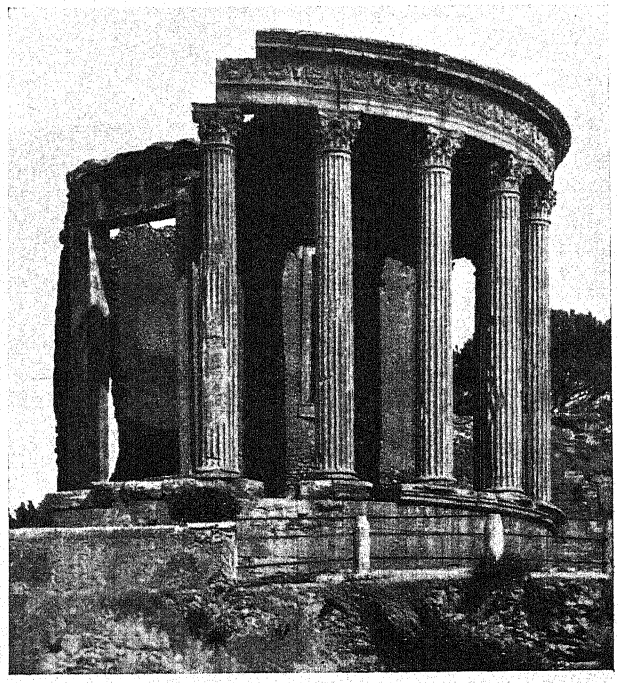


Fig. 632. — Temple of the Sybil (so-called). TIVOLI.

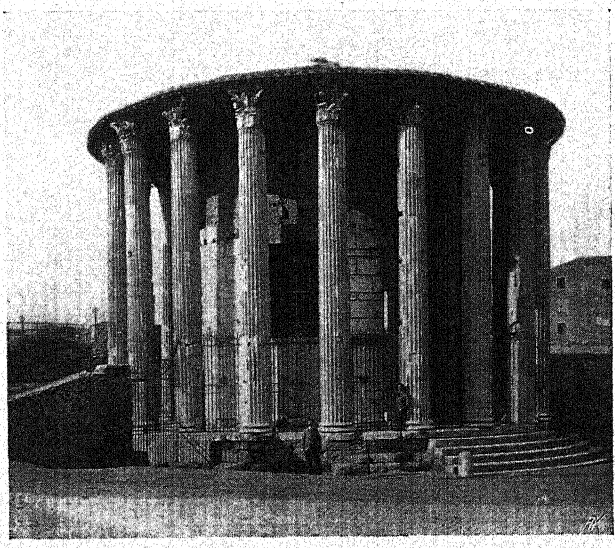


Fig. 633. — Temple of Vesta. ROME.

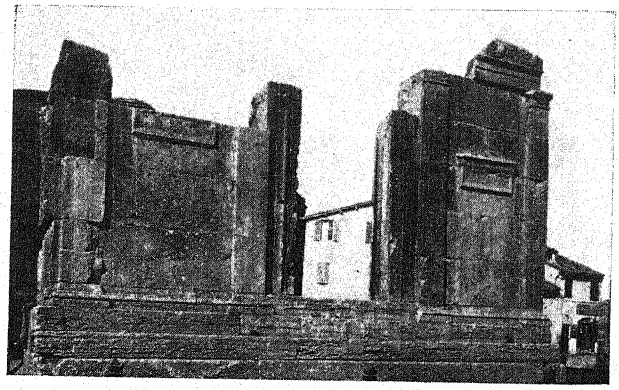


Fig. 634. — Monument to Bibulus. Rome.

ing; although their design is that of the Greek Corinthian order, they are very rudely carved and not gracefully proportioned. The acanthus leaves do not possess the delicate perfection of the Greek models from which they are copied. These circular temples are a very characteristic feature of Roman art. It may be that the popularity of this form of temple was due to some tradition perpetuating the shape of the huts of the primitive Latin people.

Very similar was the circular temple in the Forum which was also dedicated to Vesta. There is another which may have been built under the Empire, but which preserves the same type. It is still in an excellent state of preservation and stands near the Tiber. This temple is still known as the temple of Vesta (fig. 633). It was built of marble and is consequently finer in its details than the one at Tivoli.

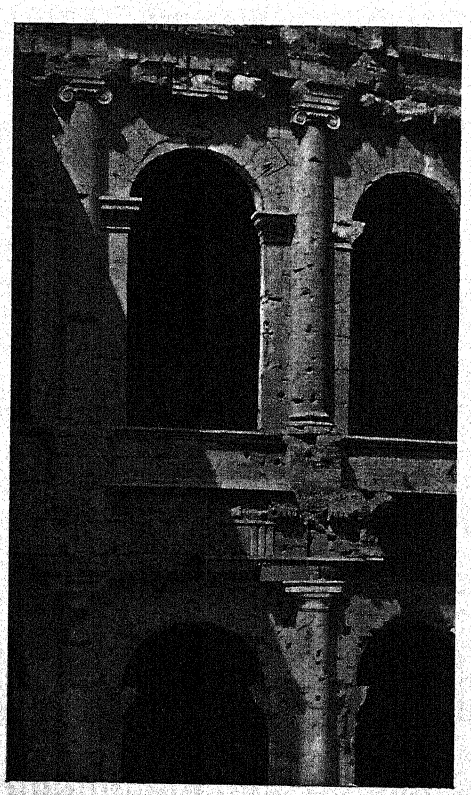
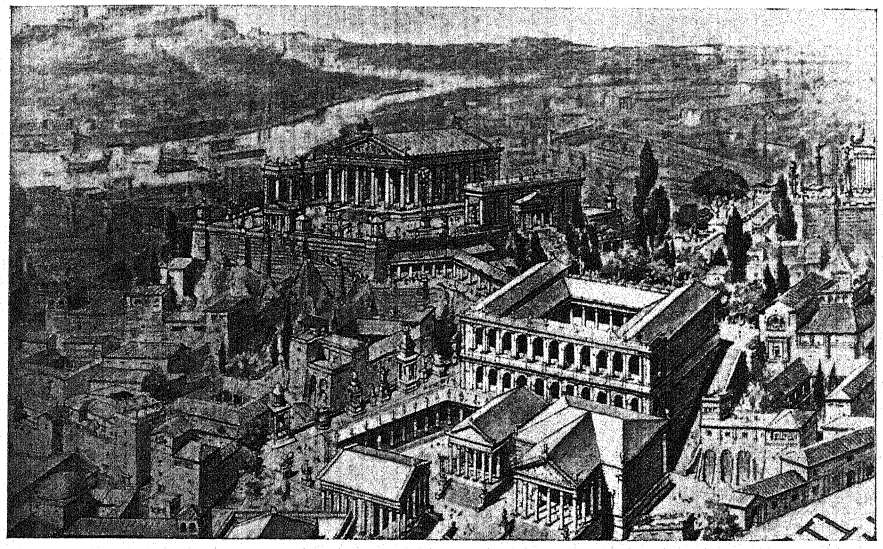


Fig. 635. — Theatre of Marcellus. Rome.

In addition to their temples, the Romans began at an early period, soon after the establishment of the Republic, to erect monuments in honor of some illustrious man or in commemoration of some great event. During the course of the excavations for the monument of Victor Emmanuel at Rome, they discovered the ruins of a small rectangular building which was the venerable forerunner of the many honorary columns, triumphal arches, statues and trophies which the ancient Romans never ceased to erect during the long centuries of the Republic and the Empire. This was the famous aedicula set up outside the Porta Flaminia in honor of a



1 2 3 4

Fig. 636. — Restoration of the Capitoline, the Tabularium, and the temples at the west end of the Roman Forum.

1. Temple of Jupiter Capitolinus. — 2. Temple of Saturn. — 3. Temple of Concord. — 4. Tabularium.

tribune of the plebs named Bibulus. The little monument was dedicated to him by the city in recognition of his services (fig. 634). It was set upon a base or *podium* not unlike those of the temples and was ornamented with modest mouldings and pilasters carved in the stone blocks of which it was constructed. In spite of its plain design, it offers a number of features characteristic of Roman art, such as the shields on the walls and the frieze of *bucrania,* or ox-skulls, alternating with garlands.

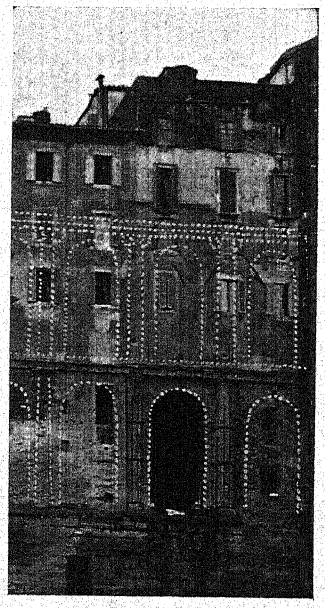


Fig. 637. — Tabularium. Rome.

Another very characteristic feature of Roman architecture began to appear during the Republic. This was the superimposition of the various orders above one another. The Doric, as the most massive, was employed in the lower portion of the building. The second story was ornamented in the Ionic style, and at times a third story was added which was finished with columns or pilasters of the Corinthian order. In this manner the Roman architects were able to construct monumental works of the most complicated design and still use the same simple elements employed by the Greeks in a one story building like a temple. An excellent exam-

Fig. 638. — Terra-cotta head from the decoration of an Etruscan temple. *(Villa Giulia.)* ROME.

ple of this combination of the different orders of architecture is to be seen in the theatre constructed by Marcellus during the last years of the Republic, for extensive remains of this structure are still standing at Rome. The first example of this type, however, was an ancient building which was destroyed before the end of the Republic. This was the old Tabularium, or hall of records, which extended across the valley of the Forum just below the Capitoline (fig. 637). Some of its arches are still to be seen incorporated in the mediaeval walls of the building which now occupies its site.

Up to the present time the basilica has been considered the earliest type of monument which was original with the ancient Romans. This was a public building utilized by assemblies of people and where contracts were made. It also contained a tribunal which settled disputes between litigants and corresponded to our own civil courts. As its character was both civil and religious, the basilica seemed to symbolize the social organization of Rome. Nevertheless, its origin is to be sought in the Orient. We have already seen that the basilica at Pergamum was a broad colonnade which served as a general meeting place, behind which the library was located. At Rome the basilica became a hall, but this arrangement is largely derived from the double colonnades of Hellenistic architecture. In the Orient the basilica often consisted of a colonnade of two naves or passage ways which were never enclosed within walls. At Rome, however, the basilica contained a nave and two aisles. The nave was much larger than the aisles and was really a large hall with a colonnade on either side. The first Roman basilica was built by the censor, Fulvius Aemilius, in the year 179 B.C. It remained under the patronage of the family and they took pride in restoring it during the succeeding centuries, so it was always called the Basilica Fulvia-Aemilia. It lay on one side of the Forum. The ruins that are now being excavated belong to another building con-

Fig. 639. — Roman portrait bust of the Republican period. *(Vatican.)*

structed on the site by Aemilius Lepidus about the year 54 B.C. This building was a forerunner of the purer decorative style of the period of Augustus (fig. 649).

Fig. 640. — The wolf of the Capitol.

Our knowledge of the first Basilica Aemilia is derived from coins and reliefs. It may have been simply a combination of open colonnades, as we know was the case with the Basilica Julia, erected by Julius Caesar opposite the Aemilia. The Basilica Julia had a nave and two aisles on either side. The excavation of the Forum has laid bare its plan and it can be plainly seen that the colonnades had no outer walls, for the pavement appears between the bases of the columns. The aisles, or lateral corridors, often had two stories, and the nave was as high as both. Later the basilica became an enclosed hall with a portico outside and a nave and two aisles within, like our Christian churches.

Fig. 641. — The Orator.
(Museum of Florence.)

Keeping in mind what we have seen of the early architecture of Republican Rome and the influence exercised by the Etruscans and the Greeks of southern Italy, we shall make a brief study of the other arts. In a general way, we find the same things to be true of sculpture. The Etruscans followed Greek models and the Romans imitated the Etruscans. Except in the case of the sarcophagi of soft stone, both showed a decided preference for terra-cotta and cast bronze over stone carvings. Many remains of these terra-cotta figures still exist which once decorated the triangular pediments of the Etruscan temples. They are always in the Greek style, but are somewhat altered by being modeled in clay (fig. 638). Terra-cotta figures also ornamented the early temple on the Capitoline at Rome, a building which surely dated from the time of the Etruscan kings.

It is well known that a portrait statue of Cornelia, the mother of the Gracchi, was set up in the Forum. The base of this statue is still

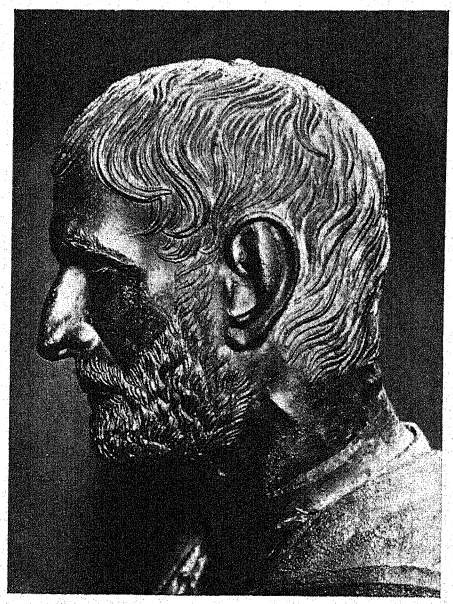


Fig. 642.—Portrait sculpture of Brutus (so-called). *(Capitoline Museum.)*

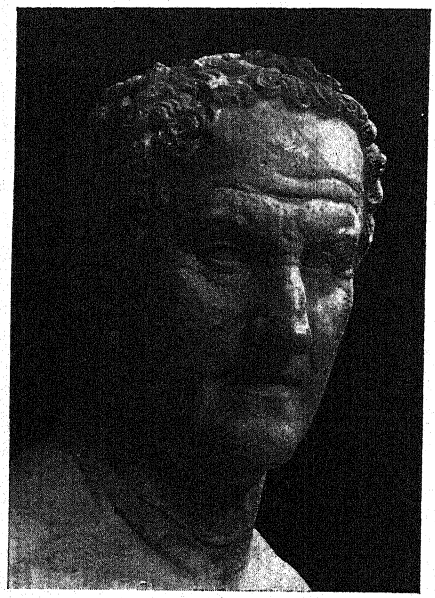


Fig. 643. — Portrait sculpture of an old man. Period of the Republic. *(Vatican.)*

to be seen, but the statue itself has disappeared. The indications are that it was a standing figure resembling the Greek funeral statues. Now that the world is so familiar with the many Greek portrait statues of persons of note, poets, orators, and even private individuals, the realism of the Roman portrait sculptors is not so surprising, but until recently it has been considered a trait peculiar to the new art which grew up in Rome. From the very first, however, this art possessed a number of features which were purely Roman. Pliny tells us of the great number of sculptures which were preserved down to the first century B.C., owing to the religious veneration with which they were regarded. This antiquary displays much curiosity regarding problems of archaeological research and discusses the question as to how much of the style of the statues of Rome was purely Roman and what its character really was. To give us some idea of the early and simpler productions of Roman art, we have only the portrait head of a young girl crowned with laurel. This is an original and not a copy (fig. 639). It was carved from the volcanic stone of Latium and is now in the Vatican.

The Romans first learned the technique of bronze-casting from the Etruscans who were past masters of this art. Indeed, it may be said to have been the national art of Etruria. Here, too, the subject matter was frequently taken from Greek sources. The magnificent bronze head of the statue of Sleep reproduced in the previous chapter (fig. 598) was discovered in Etruria and it was probably carved there. The famous bronze wolf with the twins Romulus and Remus, which was always looked upon as the palladium of Rome, was doubtless cast for the Romans by the bronze-workers of Etruria at a time when the former

still turned to their neighbors for works of art (fig. 640). There is also the excellent statue called The Orator in the Museum of Florence. This was found in Lake Trasimene and its style is purely Etruscan. It gives us an excellent idea of the great tribunes of the Roman Republic. The eyes are hollowed out, and although they probably had enamel pupils originally, the dark cavities really add to the expression (fig. 641). Among these famous examples of bronze-work, we should also mention a much later work which may be purely Roman. This is the head which was supposed by the students of the Renaissance to be a portrait of Brutus, the great tribune who expelled from Rome the descendants of the Etruscan kings (fig. 642). The limitations imposed by the technique of bronze-work soon ceased to satisfy the Roman people. The same was true of the sculptures of common stone, and they turned to marble which was not lacking in Italy. An expressive realism still continued to be the dominant note; one admirable statue is that of an old man with a wrinkled face whose sunken lips betray the loss of his teeth (fig. 643). Besides these portraits of private individuals, we begin to see public statues of the great men of the last years of the Republic. The most famous is that of Pompey, now in the Palazzo Spada. It was discovered on the site of the Curia and there is a spot on the thigh of the figure which is exactly the color of marble stained by blood. For this reason it is believed to be the very statue of Pompey against which Julius Caesar leaned when he fell beneath the daggers of the conspirators. At all events, this statue is of the style of the Republic and has still something of the impersonal character of the Greek statues of the same period. The weight of the body rests upon one foot as in the type of the Greek athlete. One hand is extended like The Orator in the Museum at Florence. The face is cold and almost ugly because of its hardness. It is very different from the face of Caesar of whom we have a number of portrait heads. Here we see accentuated the nervous nature and ill health of a man who maintained himself by sheer force of will (fig. 644).

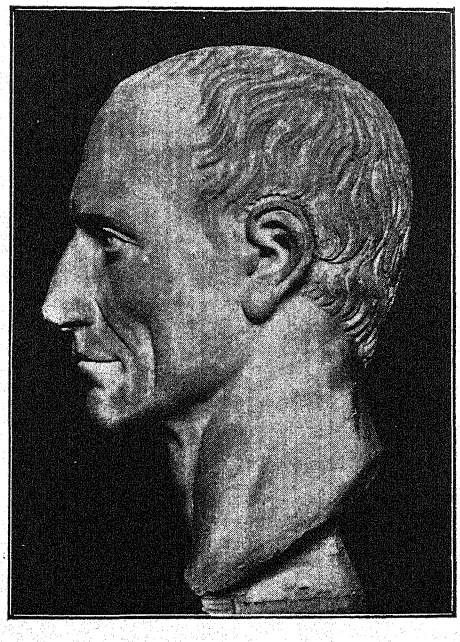


Fig. 644. — Portrait head of Julius Caesar. *(British Museum.)*

Nevertheless, we are still very ignorant regarding the art of this period and we do not yet know how much of it was Roman and how much borrowed from her neighbors. When the Romans conquered Etruria the statues of the gods and the ex-votos of the Etruscan temples were carried off as trophies. After the capture of Volsinii by the Romans in 265 B.C., not less than two thousand

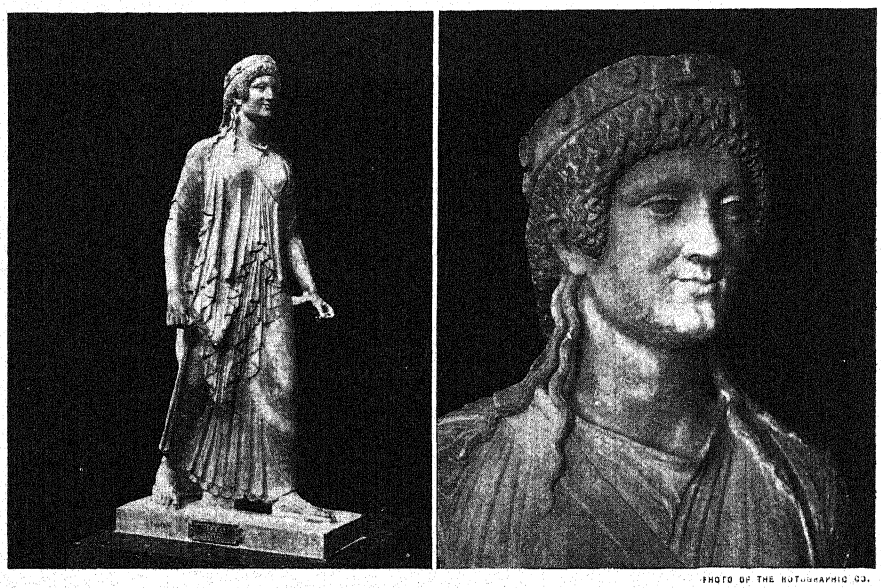


PHOTO OF THE AUTOGRAPHIC CO.

Figs. 645 and 646. — The Diana of Pompeii

bronze statues were brought to Rome. The problem is complicated still further by the fact that the Roman artists were also the pupils of the purely Hellenic Greeks of southern Italy. Pottery was sent to every part of the peninsula from Cumae, the oldest Greek colony in Italy, founded as far back as the ninth century B.C. These Cumaean vases are unmistakable and found in all the Etruscan cemeteries. Later, during the classical period, the Greek colonies in the extreme south of Italy, Tarentum, Crotona and Locri, offered as complete a picture of Greek life as any of the cities of Greece. Rome, however, was still too undeveloped to profit by the example of these cities.

In Naples a local school of sculpture grew up which copied the Alexandrian models so highly prized by the Roman collectors of the Republic. Some workshops even went so far as to produce types and compositions of their own which were not without interest. One peculiarity of this school of sculpture, which seems rather odd, was an inclination to imitate the work of the archaic schools of Greece. A large number of statues and reliefs have come down to us from this period in which we find the naive and rigid treatment of folds of drapery and the zigzag arrangement of the borders together with the lifeless attitudes and gestures characteristic of early Greek art. In some cases it is extremely difficult to tell whether they are actual copies of sixth century originals dating from a time when the Greek sculptors were not yet sure of their technique, or whether they are clever pastiches of the sculptors of the Hellenistic school of Naples. The most famous of these statues is the Diana of Pompeii (figs. 645 and 646). This is an imitation of the naive and labored manner in which the archaic sculptors attempted to represent a moving figure. The stereotyped smile, the large eyes, and the symmetrical arrangement of the hair show plainly the pains the sculptor has taken to produce the effect of a very an-

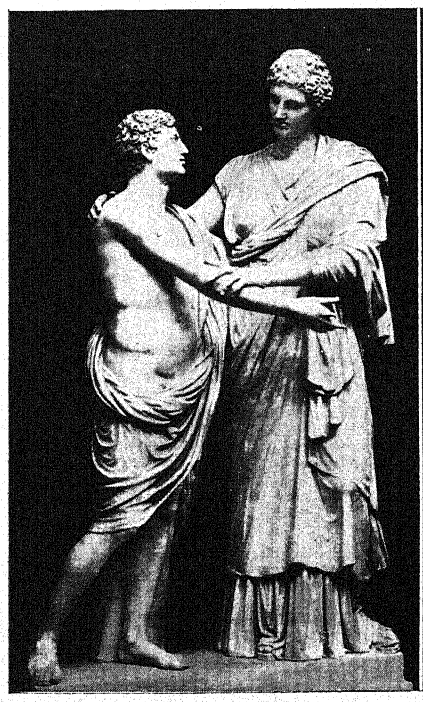


Fig. 647. — Group of Iphigenia and Orestes.
(Museum delle Terme.) Rome.

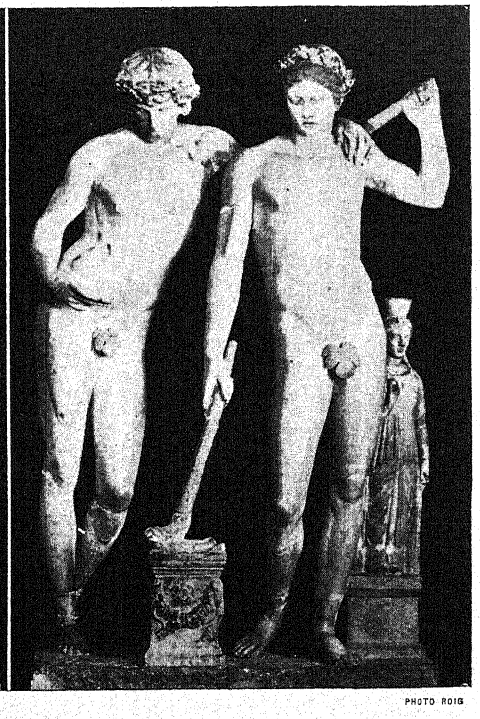


PHOTO ROIG

Fig. 648. — San Ildefonso Group.
(Museum of the Prado.)

cient statue. The Diana of Pompeii is a more or less faithful reproduction of a lost archaic original. It was probably a Greek statue of metal and ivory which had been brought to Naples, where they copied it as they did the famous statues of the classical period. Although in this case the imitator has not succeeded in disguising the fact that it is a late copy, there are other sculptures, especially reliefs, which it is impossible to distinguish from the genuine archaic originals.

These attempts to imitate the work of the schools of the past indicate clearly that one of the characteristics of the Hellenistic school of Naples was a remarkable erudition and an accurate knowledge of the earlier artistic types. The founder of this school is believed to have been a Greek named Pasiteles. He is known to have been very versatile, but none of his works have survived. He was also an erudite writer and the author of a five volume work on Greek art which was one of the principal sources of Pliny's esthetic studies. Pasiteles seems to have been a man of eclectic genius and his shop had the highest reputation of any of the period. According to his book, he followed the modern method of elaborating his work in clay. His pupils then copied it in marble. One of the latter is believed to have been the Stephanus who signed one of the statues now in the Villa Albani, calling himself a pupil of Pasiteles. Menelaus was a pupil of Stephanus and the author of the classical composition now in the Museum delle Terme. This is a group of two figures artistically arranged and beautifully executed (fig. 647). In spite of its elegance it has the coldness char-

acteristic of these erudite schools which were inspired by an admiration for the works of the past rather than by life itself. To the same school belongs the San Ildefonso group, now in the Museum of the Prado at Madrid. It was so named because it was long in the palace of La Granja or San Ildefonso. It is composed of two statues, one an imitation of the work of the archaic period, and the other carved in a much later style (fig. 645).

Summary. — The study of the prehistoric peoples of Italy began only recently. The territory of the first inhabitants of Latium was invaded in the neolithic age by a people who probably came from northern Italy, who are called the Terramara people because of the remains that have been found of their dwellings on piles. Rome was then founded and about the same time the Etruscans settled on the western coast of Italy. They were the teachers of the early inhabitants of Rome. Their culture was Ionic. Besides their tombs, they constructed massive walls and great hydraulic works. Their walled cities had magnificent gates. Their temples differed from those of classical Greece in their widely spaced columns and great porticos. Under the teaching of the Etruscans, the Romans soon learned to build. Few buildings still remain from the period of the Republic and these are built of the volcanic stone of Latium. We see the Doric order in the temple of Cori, the Ionic in that of Fortuna Virilis, and the Corinthian in that of Tivoli; but executed in a style peculiar to the Romans. The Roman temple was set upon a high base called a *podium*, which was sometimes ornamented. The first commemoratory monument was the aedicula dedicated to the tribune, Bibulus. During the period of the Republic the Romans began the superimposition of the different orders of architecture. The basilica was the most characteristic public building. Portrait sculpture began early. The Greeks of southern Italy also influenced strongly the art of republican Rome.

Bibliography. — B. Modestow: *Introduction à l'histoire romaine*, 1907. — O. Montelius: *La civilization primitive en Italie*, 1895. — G. Boni: *Sepulcretum del Septimontim preromuleo*, 1906. — J. Martha: *L'Art Etrusque*, 1889. — W. Helbig: *Italiker in der Po-Ebene*, 1879. — Ch. Hulssen: *Il foro romano*, 1905. — O. Maruchi: *Le Forum et le Palatin d'après les dernières découvertes*, 1902. — L. Fenger: *Le temple Etrusco-Latin de l'Italie centrale*, 1909. — Ch. Hulssen: *Bilder aus der Geschichte des Kapitols*, 1899; *Die neuesten Ausgrabungen auf dem Forum Romanum*, 1910. — H. Wurz: *Zur Charakteristik der klassischen Basilica*, 1906. — L. A. Milani: *Museo topografico della Etruria*, 1898. — Eg. Petersen: *Vom alten Rom*, 1898. — R. Delbrück: *Hellenistische Bauten in Latium*, 1907-1912. — *Die drei Tempel am Forum Holitorium in Rom*, 1903. — G. Karo: *Le orificeria di Vetulonia*, 1901. — Guy Dickins: *Hellenistic Sculpture*, 1920.

Periodicals. — *L'Anthropologie*. Paris. — *Bulletino di Paleontologia italiana*. Parma. — *Notizie degli scavi*. Roma. — *Mitteilungen des Kaiserl. deutschen archäologischen Instituts. Römische Abteilung*. — *Revue Archéologique*. Paris. — *Journal of Roman Studies*. London. — *Bulletino della Commissione di Archeologia communale*. Roma.

Fig. 649. — Window decoration. *Basilica Aemilia. (Roman Forum.)*

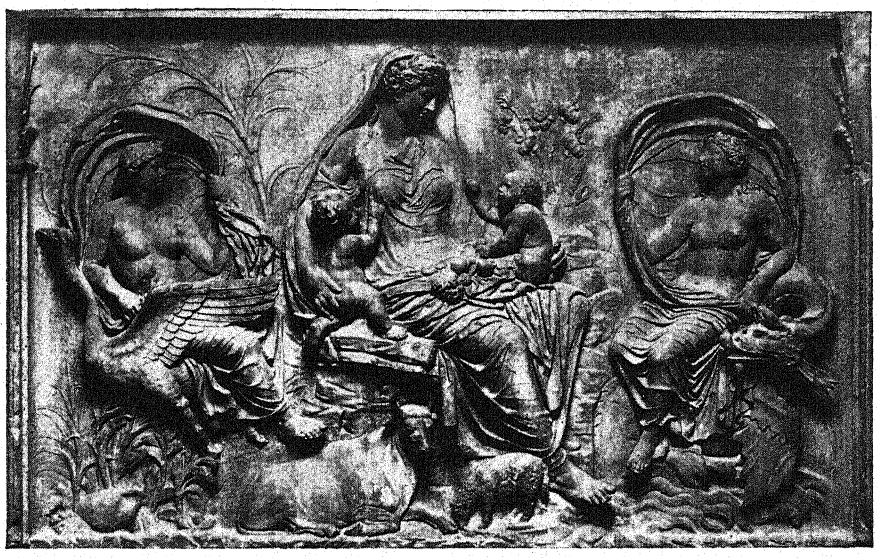


Fig. 650. — The Earth Goddess, Tellus, with the spirits of air and water.
Relief from the *Ara Pacis. (Uffizi Gallery.)*

CHAPTER XVIII

ROMAN ART UNDER AUGUSTUS AND THE CLAUDIAN EMPERORS. — HELLENISTIC ART AT ROME. — AUGUSTAN ART. — THE ROMAN HOUSE. — STYLES OF DECORATION. PORTRAIT STATUES. — ARTICLES OF LUXURY.

In the previous chapter we traced the growth of the great public works during the last years of the Republic. Caesar not only personally supervised the erection of his Basilica Julia, but also supplied Aemilius Lepidus with funds for the rebuilding of the Basilica Aemilia, which was the beginning of a general program of reconstruction in the Roman Forum. If Caesar's career had not been cut off so early, there is no doubt that he would have carried out a large number of the improvements for which Augustus became famous. While the saying ascribed to the latter, that he found Rome a city of brick and left it a city of marble, has a certain basis of truth, it is not entirely correct. As a matter of fact, Republican Rome was not built of brick, but of a soft volcanic stone found in Latium. Its monuments were constructed of large blocks of this grey stone which were brought from the neighboring quarries. Furthermore, the beautifying of the great city was not begun by Augustus so much as it was by the wealthy patricians of the later Republic who had been carried away by the inspiration they received from the art of Greece. During his long reign, Augustus constructed many public works of a most useful nature, but to these patricians is rather due the credit for initiating a new era of artistic progress. Augustus represents, more than antyhing else, the official recognition of the art derived

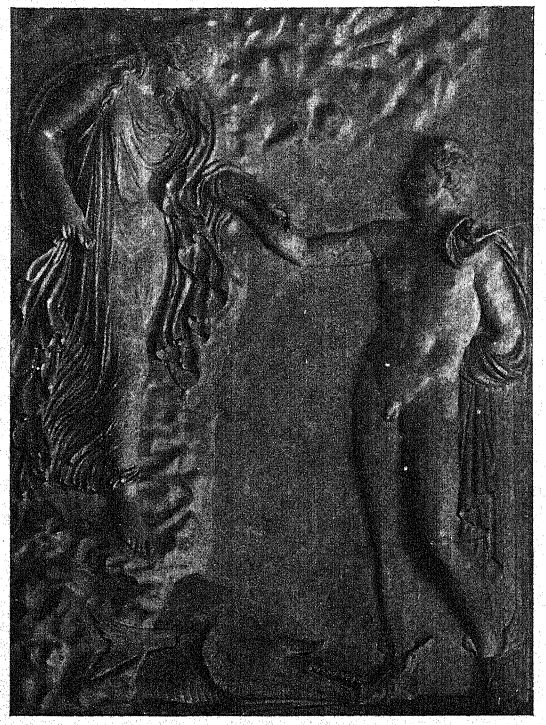


Fig. 651.—Perseus and Andromeda. *(The Capitol.)* ROME.

from Hellenistic sources. In Cicero's famous eulogy of the life of Cato we hear the last echo of the protests of those who viewed with sadness the disappearance of the austere customs of the Roman patriciate and the loss of the Republican virtues of an earlier day in the ostentations and artistic tastes of a new era.

Augustus came out unreservedly in favor of Hellenistic art and put an end to this vacillation. He, and with him all Rome, accepted without further question the ideas of the Greek world of that period. His immediate successors displayed the same spirit, and although they may not have possessed the artistic temperament of the founder of the Empire, even the most corrupt of the Claudian Emperors were filled with the building mania so characteristic of the degenerate descendants of great families. From Tiberius down to Claudius and Nero they, rather than Augustus, rebuilt in marble the Immortal City. Moreover, Roman art under the emperors of the house of Augustus down to the time of Vitellius always preserved a certain Greek flavour, and for this reason it will be treated in a chapter by itself.

Following this period two great dynasties, the Flavians and Antonines filled another century, and it was under them that Roman art, by this time a riper product, fully developed its own forms, such as the great arched vaults and the monumental compositions seen in the new forums, public baths and other public buildings. To this period of Roman art in the second century A.D. we shall also devote a chapter. Under the long series of later emperors who followed down to the time of Constantine we shall see the art of Rome declining, but not without many interesting innovations, and evolving the forms out of which grew the art of the Middle Ages. We shall devote the last chapter of this brief study of Roman art to this period, which may be considered as lasting until the foundation of Constantinople.

During the first period, which extended almost until the end of the first century A.D., Rome was recognized as the new capital of the world, so we can readily understand how artists would flock to this city from all the Hellenistic art centres, especially sculptors. One of the most difficult problems of the study

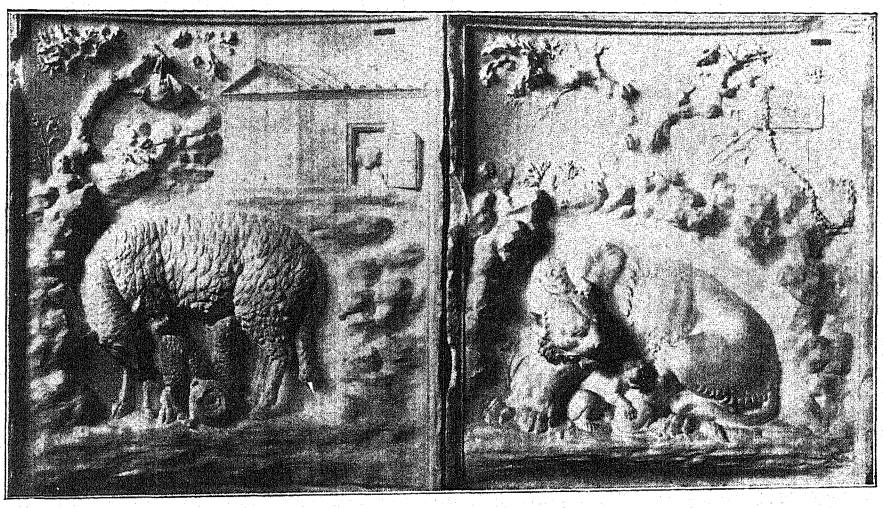


Fig. 652. — Decorative reliefs found at Rome. *(Museum of Vienna.)*

of this period is to distinguish between what was still Greek and what was already Roman among the works of art produced during the time of Augustus. The problem is still further complicated by the fact that these Greek artists were in turn influenced by the art indigenous to Rome. In every case there is a question whether we are dealing with the work of a Romanized Greek artist, or that of a Hellenized Roman.

As examples of the works of the early years of the reign of Augustus, executed possibly by artists who had settled in Rome but who still preserved the spirit of Greece, we might mention a group of beautiful reliefs discovered in various parts of the city, some of them on the Palatine itself. They constitute a series of small sculptured panels which may have served to decorate the walls of rooms. One of these, which is exquisite, represents a theme already portrayed in the ancient Greek paintings; this is the rescue of Andromeda by Perseus (fig. 651). The beautiful maiden descends some wet rocky steps toward the hero. The sea-monster lies at her feet, a testimony of the conflict that has just taken place, but we are not so impressed by the heroic exploit as by the sophisticated grace with which the two meet. The young man extends his arm as the maiden approaches in gratitude for her rescue. Tunic and mantle fall in parallel folds with a delicate beauty often found in nature itself, as in the lines of a beautiful feather or an open flower. Another of these reliefs represents Endymion sleeping. The youth reposes easily, while his dog bays as if it saw Diana appearing in the background. This background is rendered with horizontal shadows which give a plastic representation of the approaching darkness. Two details are noteworthy, the moisture on the rock in the Perseus relief and the shadows in that of Endymion. Realistic effects of this sort really belong to the field of painting, and the artists of Greece would never have dared to attempt them in a sculptural composition.

The same impression of Hellenistic composure combined with Latin realism

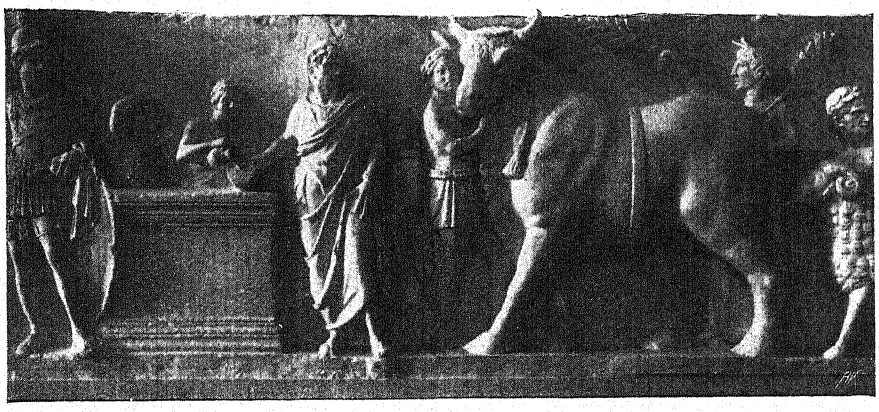


Fig. 653. — Frieze from the altar of Domitius Ahenobarbus. *(Louvre.)*

is produced in two other charming reliefs. These are called the Grimani reliefs after their first owner. They were discovered in Rome and are now in the Museum of Vienna. One represents a ewe, and the other a lioness, both with their young (fig. 652). These probably belonged to a fountain. In the background we see the landscape so admired during the Hellenistic period which still served as a model for the artists of Imperial Rome. In the relief with the ewe, we see a shepherd's pouch hanging gracefully from a tree and the open door of a sheep-cot; in the other, beside the lair of the wild beast, there is an altar with bacchic wand and garland.

However, the feeling for the historic and the extreme positivism, we might say the common sense, of the Romans soon demanded of their Greek masters a more precise imitation of the real. The most ancient work of a historical nature that is purely Roman seems to be the series of reliefs which have recently been identified as those of the frieze ornamenting the altar of Domitius Ahenobarbus in commemoration of his victory at Brundisium. They were discovered long ago and were sold at Rome and scattered. Some are now in the Museum at Munich, and others are in the Louvre. It has now unfortunately been forgotten where they were found.

The Munich fragments represent a group of Nereids and Tritons accompanying the chariot of Venus and Neptune. Their style is so purely Greek that it is customary to give them as examples of the last phase of the Hellenistic art of Alexandria. But in the reliefs from the front of the altar, now in the Louvre, we see represented for the first time a scene often repeated in later Roman art. This is the religious sacrifice or thank-offering with which a military leader always began and ended a campaign. Domitius is dressed in the toga of a sacrificial priest and stands to one side of the altar to which the attendants lead the victims for the sacrifice. Both Domitius and the attendants wear laurel wreaths. Further on, the veterans take leave of their general. They are much affected and one hides his face as he leans against his horse (figs. 653 and 654). This portion of the frieze is definitely historical and represents an actual occurrence, but in the Munich reliefs, which were a part of the same frieze, the Nereids

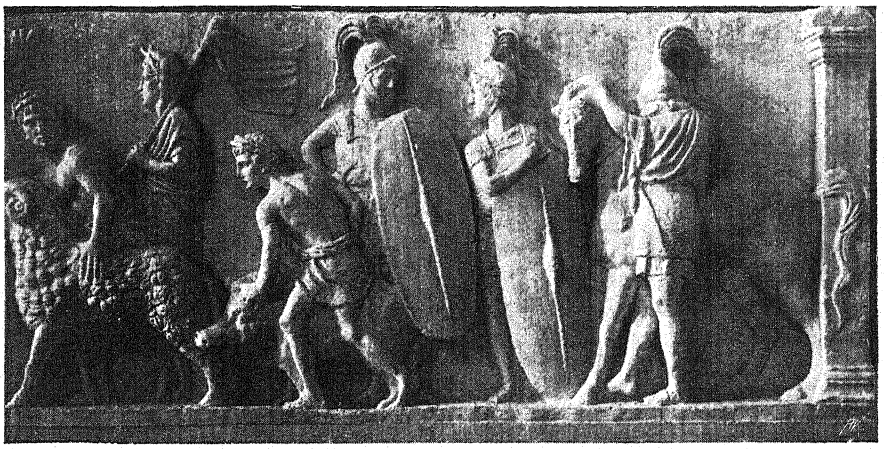


Fig. 654. — Frieze from the altar of Domitius Ahenobarbus. *(Louvre.)*

and Tritons are only a mythological allusion to the naval campaign of Domitius Ahenobarbus couched in the allegorical language so dear to the heart of the Greek.

In the portion of the frieze which is genuinely Roman, the sacrifice, it is evident that every detail is taken from the actual event. The heads of Domitius and of those who accompany him are no doubt portraits. The three victims for the sacrifice prescribed by Roman ritual, the pig, the sheep and the bull, are represented in the reverse order in this frieze, for the ceremony was to celebrate the happy end of the campaign. At the beginning of such a campaign the order was the opposite, as we see in the reliefs of the handsome tribune in the Roman Forum, which represent the same three victims (fig. 655). On the Column of Trajan and in the friezes of the arches of triumph, as well as on ordinary altars, we see picturesque groups composed of the victims, or Suovetaurilia, as they were called, and the sacrificial priests. Roman art displayed an extraordinary partiality toward this scene, which expressed both the sentiment aroused by the official State religion and the glorification of the achievements of the Roman legions.

Thus from the very first, the Roman people, although pupils of the Greeks in their art, imposed themes all their own, and these were necessarily interpreted in a style that was original with themselves. There is nothing in Greek art like the military sacrifices. An artist newly arrived from Athens or Alexandria would find it difficult to execute a commission of this nature, so radically foreign to the spirit of his own race. His own natural in-

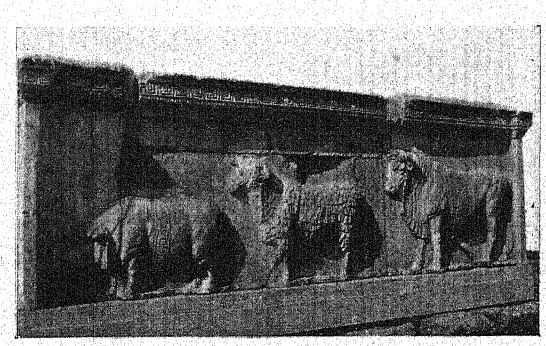


Fig. 655. — Suovetaurilia. *(Roman Forum.)*

Fig. 656. — Battle between Romans and Gauls. *(Monument at St. Rémy.)*

stinct would be to interpret it in the allegorical terms of his own mythology. This feeling for the historical and commemoratory, however, extended also to works of minor importance. Indeed, we may say that beginning with the reign of Augustus, it is one of the most essential characteristics of Roman art. We also see striking examples of this in the provinces. On the funeral monument called the Tomb of the Julii near St. Rémy in Provence, there are a number of reliefs representing battles between Romans and Gauls (fig. 656). This appears to have been erected during the early years of the reign of Augustus and was almost contemporary with the scenes represented upon it. Above the figures of the frieze hang garlands and masks supported by little Cupids, all of which is hardly in keeping with the military character of the monument itself. In the battle reliefs, however, the arrangement of the figures and the confusion reigning among the combatants are conceived with such realism that the composition is something entirely new in the development of ancient art. The figures on the frieze on the altar of Domitius Ahenobarbus are all in the same plane, but on the St. Rémy monument there is no such orderly arrangement. Some of the figures intersect others and all are thrown together in the confusion of an actual battle. The reliefs of the St. Rémy monument are supposed to be the work of a Greek artist, for the art of the Roman Empire was as yet hardly sure of itself and had not achieved the technique and facility of execution displayed in this work. But although the artist may have been a Greek, the spirit of the work is certainly Roman. We should remember that the later Hellenistic sculptors of Pergamum, when they wished to glorify a historical event like a

victory over barbarians, always idealized and transfigured the actual facts in their tragic and theatrical manner. Here we behold the battle itself. It is true that Victory appears in the centre raising a trophy, and the reclining figure to the left is a personification of the place, but these two mythological elements, Victory and the *Genius loci,* are the only ones which the Roman artists consistently preserved in their historical compositions.

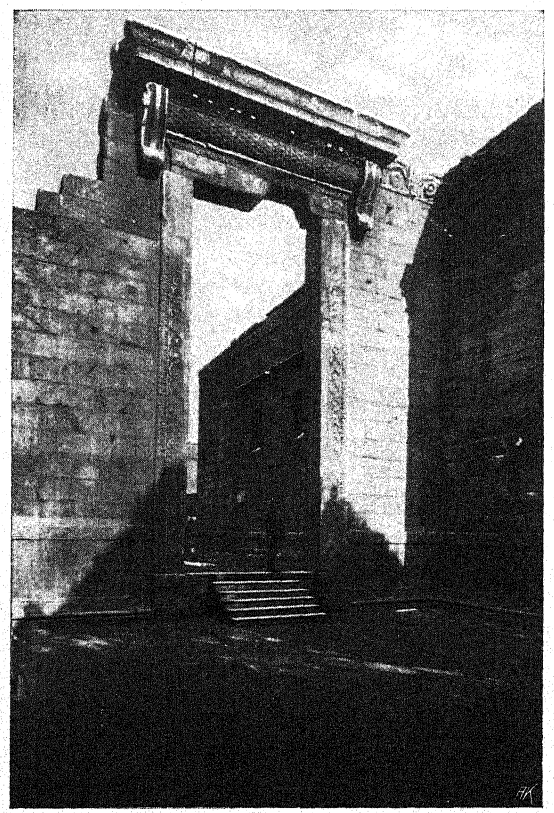


Fig. 657. — Temple of Augustus at Ancyra. GALATIA.

Architecture followed along parallel lines. The types were Greek, but they unconsciously adapted them to the more practical and realistic Roman spirit. A prominent example of this is the famous temple of Augustus at Angora, the ancient Ancyra, which was a Greek city of Asia Minor. Here we see already something of the influence exerted by the Roman genius upon the very people from whom the Romans had learned their art (fig. 657). This temple has but a single *cella.* The plan varies little from that of the usual Greek temple, but the proportions of the building are different and it is much higher. We find already that love for great size rather than beauty which was so often detrimental to Roman art. The great door seems to be merely an enlargement on a colossal scale of the doors of the Erechtheum and other Greek temples, but over the lintel here is a frieze of twined laurel leaves between the two brackets which support the cornice. This was very characteristic and was a favorite ornament of the architects of the Roman Empire.

The temple of Ancyra is better known for the long inscription carved upon its walls than for its artistic style. This inscription is called the "will of Augustus". The great Roman emperor takes leave of his people and enumerates his campaigns, the reforms he has effected, and the buildings he has constructed during his reign.

The Altar of Peace, or *Ara pacis,* at Rome is mentioned in this inscription in the following words: "Upon my return from Spain and Gaul, after completely pacifying these provinces, the Senate decreed as an act of thanksgiving for my

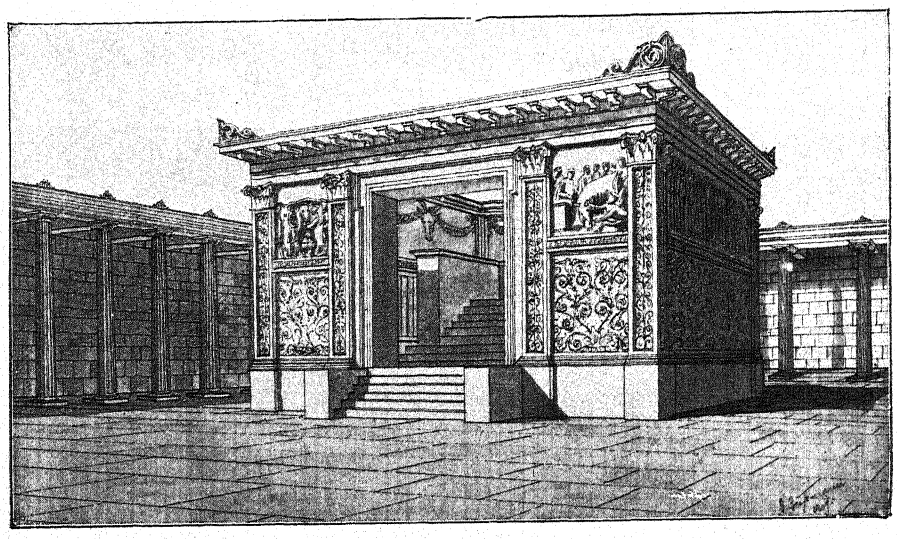


Fig. 658. — The *Ara Pacis Augustae*. Restoration according to Petersen.

return that an altar should be erected upon the Campus Martius and dedicated to the Goddess of Peace. Here the officers of the State, the priests and the Vestal Virgins should come each year to make sacrifice." Many fragments of the *Ara Pacis* were discovered during the sixteenth century and today are scattered in the Louvre, the Museum at Florence, the Vatican, the Villa Medici and the Museum of Vienna. Other portions still remain in the Palazzo Fiano, which was built on the site of the altar and it was believed that its base must be close to the foundations of this palace. The restoration of this structure was begun in 1902 by Professor Petersen, an Austrian archaeologist. He not only demonstrated the unity of style and the common origin of all the fragments which he believed to be part of the Ara Pacis, but also essayed a restoration of the building itself. With this end in view, he persuaded the Italian Government to make excavations near the Palazzo Fiano in the hope of discovering other fragments underground. This exploration completely proved the hypothesis of Professor Petersen. The great marble base of the *Ara Pacis* was found at a depth of about sixteen feet and new fragments of the reliefs were also discovered by means of tunneling under the streets in the neighborhood. We now have an accurate knowledge of the dimensions and general arrangement of this monument. The little temple containing the altar was set within an enclosure, around the inside of which extended a colonnade. The most interesting feature was the series of reliefs ornamenting the walls of the temple which was set in the centre of this court (fig. 658).

This aedicula was nearly square. It was hypethral; the walls were ornamented with two bands of reliefs, of which the lower was of sprays of acanthus leaves, and the upper one consisted of the frieze which constitutes the most important piece of Roman sculpture that has come down to us. Historians of art have compared it with the Panathenaic frieze from the peristyle of the

Fig. 659. — Relief of the *Ara Pacis*. Figure symbolizing the Senatus. *(Museum delle Terme.)* ROME.

Parthenon in which the citizens of Athens march in procession bearing the *peplum* of Minerva. Here instead of the Olympian gods presiding in the centre of the façade of the Greek temple, we see the new philosophical deities, the three elements. There is "Earth, crowned with ears of grain bringing forth fruits and cattle," as Horace sang, and those turbulent deities, Air and Water, now at rest as though calmed for the time being during the years of Augustan peace (fig. 650). On one side of the door is this group of the new deities, on the other is a symbolic person representing the people or the Roman *Senatus*. The last is an old man, still strong, crowned with laurel and with a mantle drawn over his head like that of a priest. He is about to sacrifice the three victims prescribed by the ritual (fig. 659). These two reliefs are especially interesting for we find in them the last echo of the Hellenistic style of Alexandria. This is true, not only of the three elements, which recall by their attributes and the personification of natural forces the Nile group, but also of the relief representing the sacrifice. In the background of the latter is an idealized landscape with trees executed in the Alexandrian style. The shrine is also characteristic and symbolizes the hut of Romulus and Remus who preside over the scene from above.

On the side and rear walls is the most original portion of the frieze of the *Ara Pacis*. This represents a public procession led by Augustus who is dressed as pontifex maximus and accompanied by the two consuls and a band of lictors. An interesting group follows composed of the members of his family, the Empress Livia, his son-in-law, Agrippa, and his stepson Tiberius. Then come the

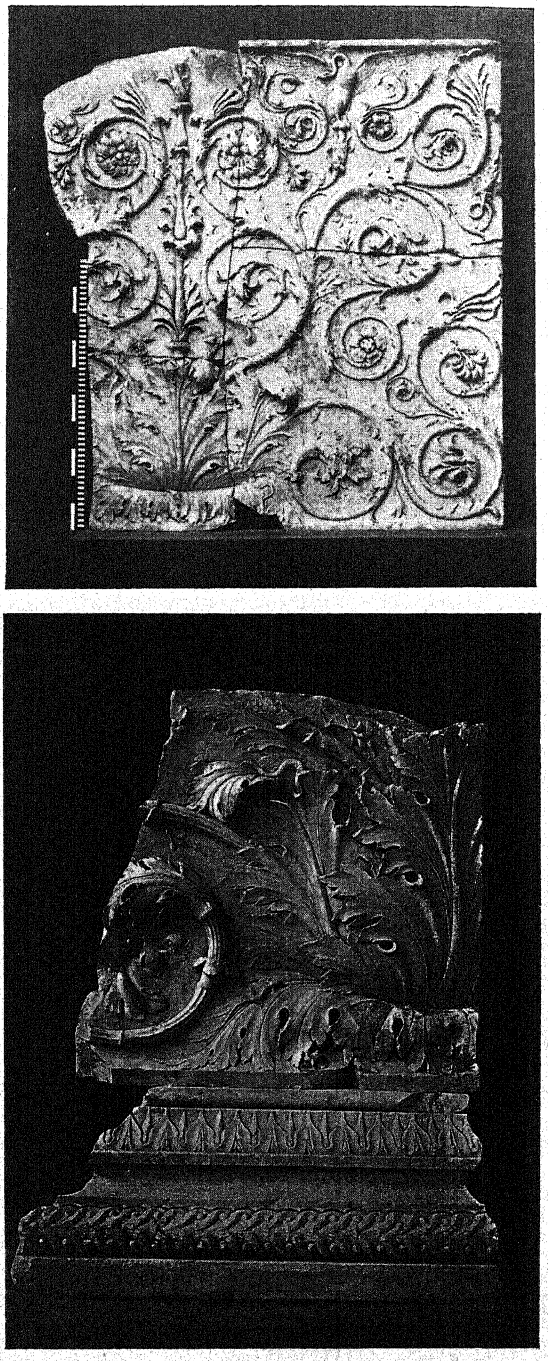
Fig. 660.— The family of the Emperor. Relief from the *Ara Pacis. (Uffizi Gallery.)*

elder Drusus with Antonia leading the little Germanicus by the hand (fig. 660). There are two others who may be Domitius Ahenobarbus and Maecenas, and behind them a train of senators and patricians who file gravely by wrapped in their togas. The procession of patricians and high dignitaries of the Roman State is portrayed with a realism that is unsurpassed, and their noble bearing is in strong contrast to the turbulent mass of Athenians on foot and horseback who attend the Panathenaic festival. Another innovation in the *Ara Pacis* is the introduction of portrait sculptures. Pericles, Aspasia and the friends of the dictator are not represented on the Parthenon frieze, but on the *Ara Pacis* we recognize not only Augustus, his relatives and the women of his family, but also the children who are to play an important part in the affairs of the coming generation.

The upper frieze representing the solemn procession is separated by a Grecian fret from the lower zone which is ornamented with foliage, the finest example of Augustan decorative art that has come down to us. At the bottom a large central cluster of acanthus leaves, mellow and transparent, spreads into an elaborate system of delicate spirals ending in palmettes, small leaves and flowers. Among these are graceful insect-forms and the swan, the favorite bird of Apollo, who was the patron deity of Augustus. The lower field is beautifully ornamented with these leaves and flowers which are never in a confused mass. It is both rich and beautiful, and its low relief also contributes to the soft and restful effect of this magnificent marble base (figs. 661 and 662). Perhaps the most interesting thing about this decorative foliage is the lively rendering of the acanthus leaves. There is a deep feeling for nature which is entirely in keeping with the intense realism of the portraits on the upper frieze. If we compare the conven-

tionalized acanthus leaves of the Greek Corinthian capital with the cluster of shoots and leaves which forms the centre of this design on the base of the *Ara Pacis*, we see how the Roman spirit imposed its own realism and power of analysis upon even the lower forms of nature. The acanthus leaves of the Greek capital are all of a size, symmetrical, and in spite of their beauty, entirely impersonal. The ornamentation of the *Ara Pacis* is, however, arranged in orderly fashion, as if the foliage itself were trained in keeping with the decorum and system of the Roman Empire, and yet each shoot is alive and growing.

Within the shrine was another frieze of garlands and laurel leaves with fruits and flowers, all supported by the typical bullocks' heads which were traditional in the art of the Republic. These garlands constituted one of the favorite motives of the early art of Rome. They formed the decoration of the frieze of the temple at Tivoli and of the monument to Bibulus. We see them here as well, as though the interior of the little *cella* were intended to commemorate the older art of Rome. In short, the *Ara Pacis* is a sublime epitome of the history of Roman art down to the time of its



Figs. 661 and 662.—Fragments of the ornamentation of the base of the *Ara Pacis*. *(Museum delle Terme.)* ROME.

erection, with its recollections of Hellenistic tradition, its portraits which were an outgrowth of Etruscan realism, the garlands of the Republic, and finally the spirit of empire triumphing in the family of Augustus. It is a plastic expression of the *Carmen* of Horace, with its glorification of the men who built the eternal city for which the poet prayed, the grandest creation that the hand of man had yet achieved.

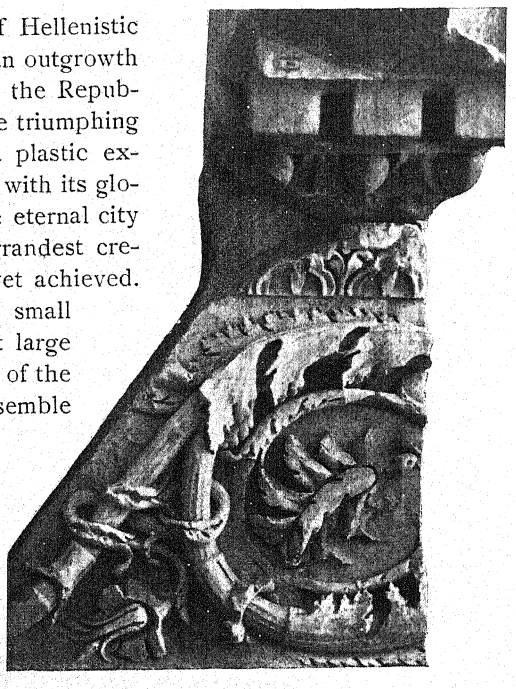


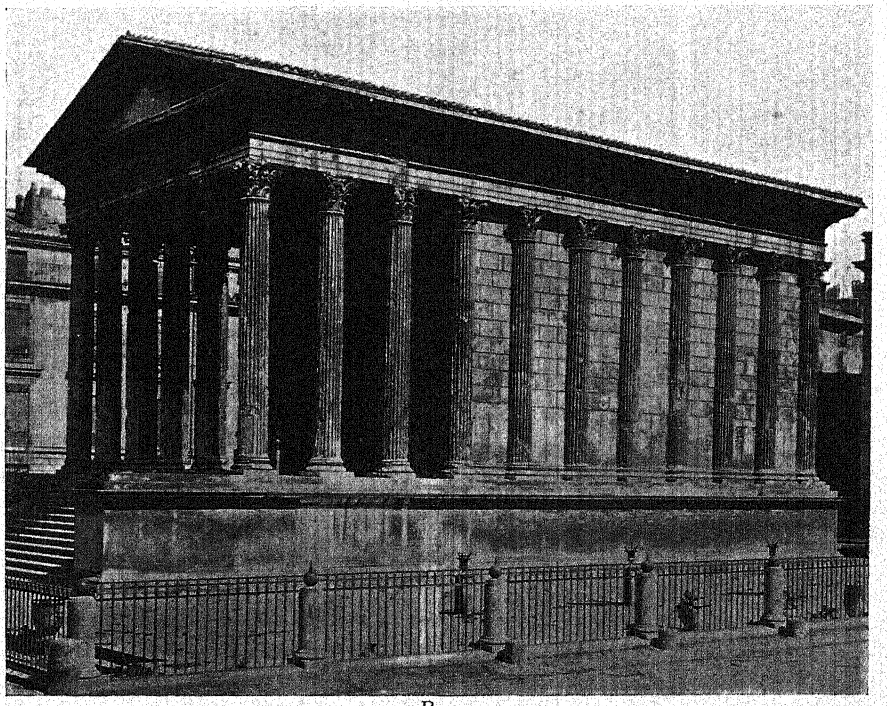
Fig. 663.—Frieze of the temple of Augustus. TARRAGONA.

Withal, the monument was a small one. The Parthenon, too, was not large compared with the great buildings of the ancient world, and when we assemble all its fragments, the *Ara Pacis* is seen to be still smaller. Its handsome façade was only forty feet long and about twenty high. Nevertheless, we have here the germ of a new art which was to spread throughout the entire Empire. On the frieze of a temple in far-off Tarragona (fig. 663) we see, only a little smaller, the same features as those of the base of the *Ara Pacis;* the acanthus shoots curve majestically as they open in leafy crests, and tendrils twine about the robust trunks of the vines. Only the animal life, which enlivens the background of the base of the Roman shrine, is lacking.

Fig 664. — Arch of Augustus. RIMINI.

Much of the art of the Augustan Age is characterized by this decorative foliage in low relief. It is admirably modelled with great delicacy and full of realistic details which confer a sort of personality on every element. This decoration is soberly distributed over the spacious white background and its very arrangement gives it a new value which appeals strongly to the intellect.

A



B

ROMAN MONUMENTS IN PROVENCE.—A. Arch of Tiberius at Orange.
B. Temple of Augustus and Roma, known as the Maison Carrée, at Nimes.

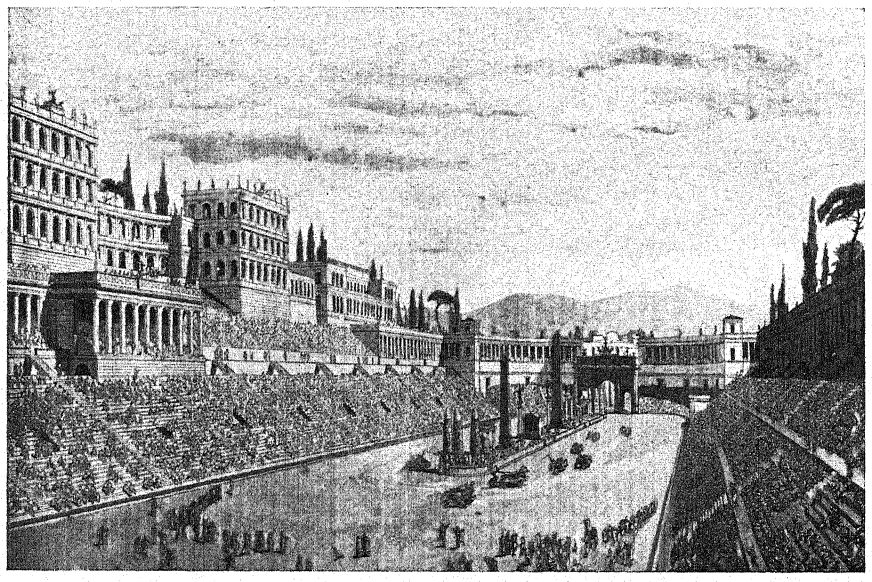


Fig. 663. — Circus Maximus, in the valley between the Palatine and the Aventine. ROME.

The mouldings are also delicate and project but little. Flat wall spaces predominate. An excellent example is the Arch of Augustus at Rimini (fig. 664). In the imposing architecture of the gateway there are two new sculptural details. These are the handsome medallions in the triangles formed by the arch. They recall the delicate heads ornamenting the gold-work of the Alexandrian period. There are some beautiful silver disks in the Museum of Berlin which so closely resemble these medallions that the comparison is decidedly confusing.

The fondness of the emperors for commemorative triumphal arches, which became so general at a later period, began during the reigns of Augustus and his immediate successors. This type of monument was so well suited to the pride and public spirit of the Roman people that there were good grounds for supposing it to have been original with the architects of the Roman Empire. As a monumental type, however, the Roman arches of triumph were derived from Hellenistic architecture. Many of the proud gateways leading into the Greek cities of Asia Minor were of the same type as the Roman arch of triumph. Under the Roman Empire these arches were still erected at the entrance to a city, a religious enclosure or a forum, like those which stand at either end of the Sacra Via in the Roman Forum (the Arch of Titus and that of Septimus Severus). But we also find them isolated on the spot where it was desired to signalize a historic event and on the dividing line between two provinces. Such a gate becomes a purely commemorative monument. The scenes represented on the reliefs of these arches attempt, so far as possible, to portray an accurate historical picture of the memorable event or of the illustrious man in whose honor the arch was erected. This use of the arch began during the reign of Augustus, for we know of one erected by him on the Campus Martius which

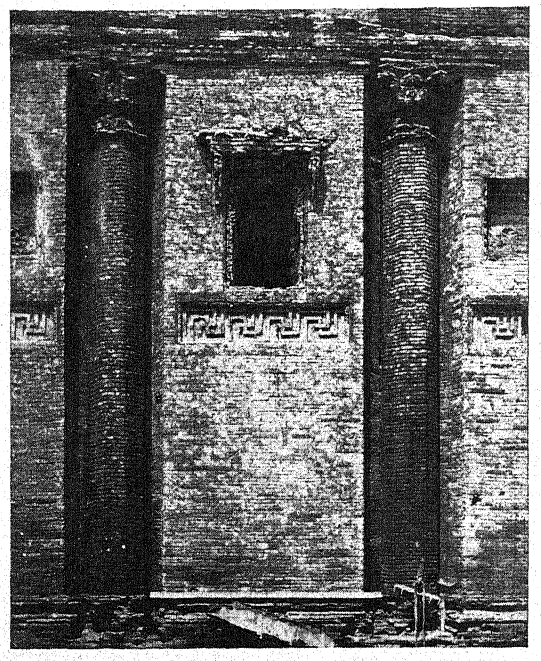


Fig. 666. – Tomb called the temple of the Deus Rediculus. ROME.

has entirely disappeared. The same is true of the arch of Tiberius. The great triumphal arch at Orange in Provence is also believed to date from the reign of Tiberius. In its reliefs we see allusions to the wars with the Gauls. This magnificent monument with its three arches towers above the highway leading into this little Provençal town, which is noted for its Roman remains. (Plate LI, A.)

Under the Claudian Emperors Rome was enriched by many splendid structures of a public nature and these now began to give to the city the monumental aspect which reached the height of its magnificence under the Flavians and Antonines. Agrippa built the famous baths which bore his name, but of these only the portico and the lower portion of the building, now beneath the Pantheon remain. The latter building was constructed in the reign of Hadrian. Claudius also built the colossal aqueduct, the ruins of which are still the chief charm of the Roman Campagna, and reconstructed the Circus Maximus at the foot of the Palatine (fig. 665). Nero built another circus on the Vaticanus and his famous Golden House. The latter was a luxurious palace with gardens adjoining it and it was to supplement the rather plain palace of Augustus which was located on the Palatine and occupied by the first emperors. Famous among the works of Augustus was his forum which was laid alongside of the old Republican Forum and was a monumental architectural composition consisting of a colonnade and in the background a temple of Mars. These buildings extended as far as the Porta Flaminia, which led into the Campus Martius, but little is to be seen of them today for they lie beneath the modern buildings which crowd the sites of the old Forums of the Emperors.

Still more to be regretted is the disappearance of the temple of Apollo which Augustus erected beside his palace on the Palatine. The excavation of this monumental building is looked forward to with much impatience. It will furnish us at least with the plan and some details of a religious building constructed after a Greek temple but modified by the Roman ideas of the Augustan period. Except for the *Ara Pacis*, which after all is a civic structure, and the temple at Ancyra in Asia, the most important temple of this period is the provincial one at Nimes, called the Maison Carrée. This temple, at least, has been

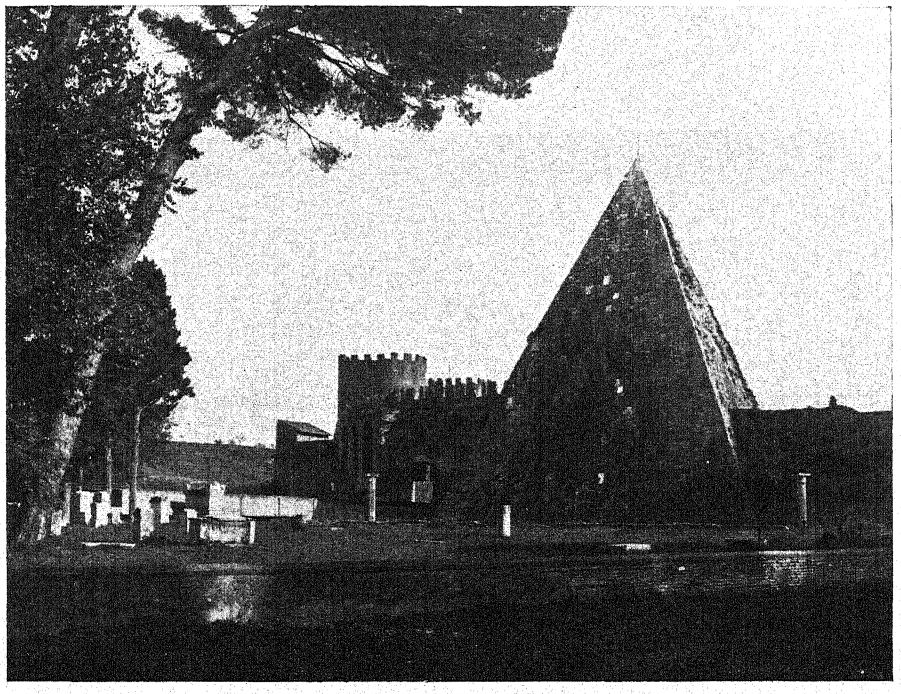


Fig. 667. — Pyramid of Caius Cestius. Rome.

marvelously preserved. (Plate LI, B.) Like the Republican temples, it is set upon a high *podium* and its plan resembles that of the temple of Fortuna Virilis for it is pseudodipteral. As in the case of the later its portico is excessively large and there is no opisthodomos. It is, therefore, a purely Latin structure. The only innovations are the handsome Corinthian capitals and a finer technique in the outlines of the mouldings. The Maison Carrée of Nimes, although its general arrangement is traditionally Republican, has a refinement and an elegance of proportion which is almost Greek. Provence was probably colonized by the Philhellenic patricians of the Augustan period. Virgil, in one of his Eclogues, describes the benevolent government of this province by his friend Gallus. In Nimes itself we find the remains of baths, today called the Nymphaeum. This is a rectangular hall with a number of recesses ornamented with alternating curved and triangular pediments. Alternating gable forms of this sort are frequently found in the buildings of Pompeii and they later came into general use in Roman architecture. The most original feature of the Nymphaeum at Nimes is the barrel-vault of stone. This in itself was nothing unusual, but here it is reenforced at regular intervals by a series of projecting arches which have the same function as the transverse ribs of the Romanesque churches of the Middle Ages. We see, therefore, that from the early days of genuinely Roman architecture local traditions already existed in the provinces which were later to play an important part in the evolution of mediaeval architectural styles.

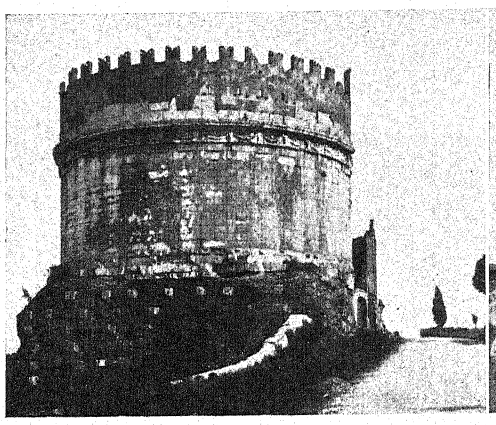


Fig. 668. — Tomb of Caecilia Metella.
Appian Way. ROME.

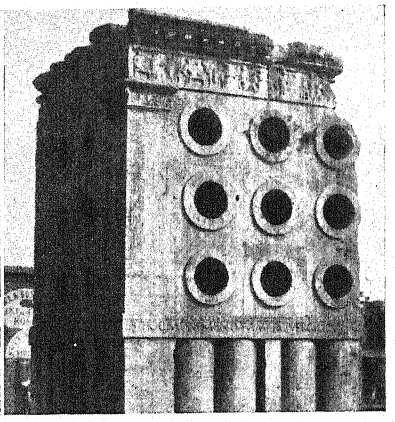


Fig. 669. — Tomb of Eurysaces.
Fuora Porta Maggiore. ROME.

Although there are some examples of great vaulted roofs dating from this period, Roman architecture under the Claudian Emperors did not as yet develop along the lines which it later followed. Their great admiration for Greek architecture caused the Romans to build their temples of great blocks of marble or other stone. But after the burning of Rome in the reign of Nero, the great quantity of broken tiles lying about led to the construction of many buildings of these tiles, trimmed to suit the purpose. The Roman tiles were flat and composed of a selected clay, so that when their edges were cut off, they made excellent bricks. They were so smooth that they could be laid with very little mortar. The smaller fragments of these broken tiles were used for ornamental patterns set into the wall. It is very probable that this style of brick construction, due to the great quantity of broken tiles on hand after the great fire, continued to be the fashion for some time, and similar bricks were made of the same clay as the tiles. An example of this type of brick construction is the tomb called the temple of the Deus Rediculus at Rome (fig. 666). We see that certain portions of this tomb are constructed of bricks of a brighter red, which accentuate the architectural lines of the monument.

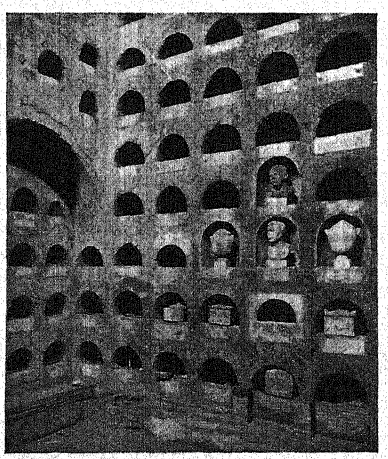


Fig. 670. — Columbarium. ROME.

About this time the Romans began to erect the colossal tombs which were often monuments of considerable importance. One of these just outside the Porta Ostiensis was built of brick and stone and incrusted with white marble. It has the form of a pyramid. On one of its faces it bears an inscription dedicated to a certain Caius Cestius (fig. 667). The pyramid of Caius Cestius is an indication of the relations of

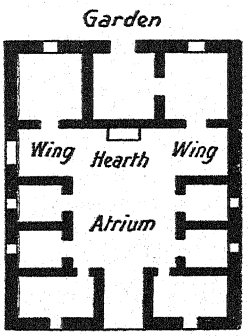


Fig. 671.—Plan of early Roman house.

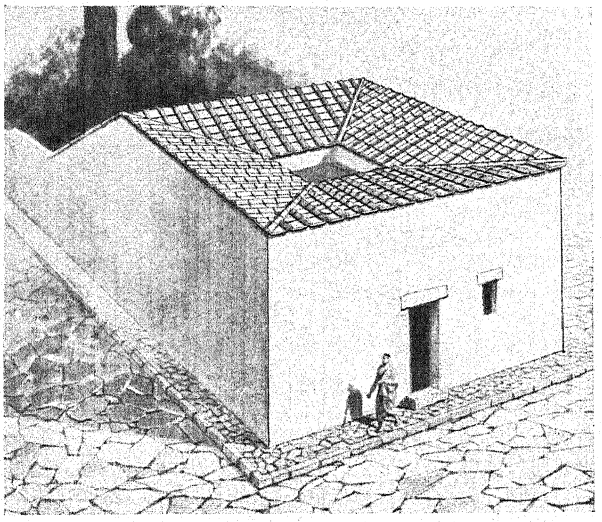


Fig. 672.—Early Roman house with atrium.

the Romans of the first century of the Empire with the Hellenistic Egypt of the Ptolemies and the interest which they took in that country. As has been noted, there was in Egypt at this time a renaissance of Pharaonic art in which certain traditional types were revived, among them the pyramidal tomb. The height of this Roman pyramid in proportion to its base is no doubt due to Hellenistic influence. The Pharaonic pyramids were much lower. But, as we have shown in the fifth chapter, the pyramids of Meroe in the Sudan which date from the same period have the same sharply pointed form as the Roman pyramid. It is evident that the pyramidal tomb did not become popular at Rome. Augustus was buried in a round building erected on the Campus Martius. This is now completely disfigured as the Popes converted it into the building now called the Teatro Correa. It appears to have been a great circular structure crowned by a tumulus of earth on which cypresses were planted. It was probably not unlike the Etruscan tumuli, although its base was higher and more monumental in character. There is a tower of this type on the Appian Way which is quite well preserved. According to its inscription, it is the tomb

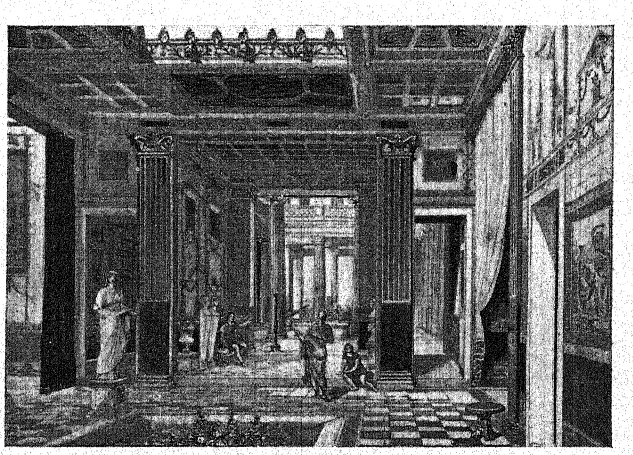


Fig. 673.—Roman house with atrium and Hellenistic court.

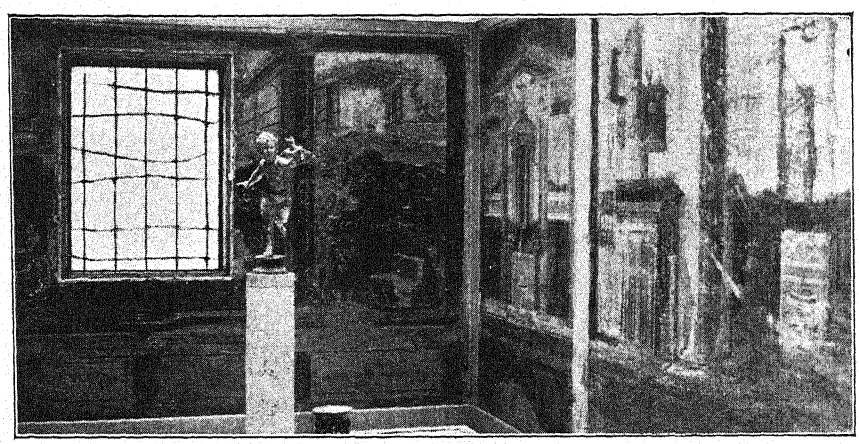


Fig. 674. — Decoration of the dining room of the villa of Bosco Reale. *(New York Museum.)*

of Caecilia Metella, the daughter-in-law of the triumvir, Crassus, and consequently a contemporary of Augustus (fig. 668). The Colonna turned this mass of masonry into a fortress during the Middle Ages, but there is still a small chamber within it which contained the sarcophagus. Not only did the great patricians erect these splendid mausoleums, but also the middle classes and even prosperous artisans as well. The tomb of the baker, Eurysaces, with its great circular openings like the doors of an oven, is still standing just outside the Porta Maggiore (fig. 669). The upper part of the tomb of Eurysaces is ornamented with a frieze representing the daily life of a baker. At this period cremation began to be generally practiced and we often find in one chamber, in the niches in the walls, the ashes of the members of the family and those of the clients and slaves as well. This has been called a columbarium because the niches gave it the appearance of a dove-cote (fig. 670).

We will now take up the Roman dwelling with its famous atrium, which was still in use down to the time of the Empire. Just as the principal feature of the Greek house was its central court, as we have seen in the houses of Delos and Priene, so the central element of the Roman house was the atrium. This was a covered room with an opening in the roof called the *impluvium*. The latter admitted the light and the rain as well. For this reason there was a shallow cistern directly beneath the *impluvium* (figs. 671 and 672). The roof of the atrium was supported by two main beams extending from wall to wall and by two lesser ones. The four formed the square of the opening, or *impluvium*, thus dispensing with the columns characteristic of the court of the Greek dwelling. This central element, the atrium, was the most typical feature of the house of the Republican period. It was more enclosed and possessed more privacy than the sunny court of the Greek house. It seems not unlikely that at first the Latin house consisted only of the atrium. Such a house with an opening in the roof would be a natural development of the primitive huts of the shepherds of Latium, which are conical in shape and have an opening in the roof.

This Roman house, consisting only of the *atrium*, would have but a single

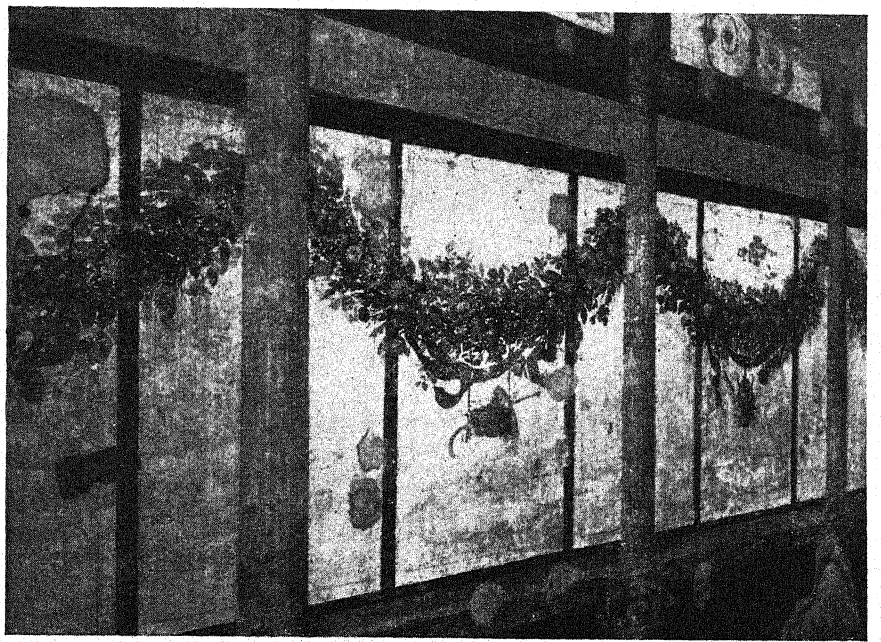


Fig. 675. — Decoration of the House of Livia. First, or *Incrustation style.*

room for the whole family, but it would be gradually enlarged by adding other rooms from time to time. As a matter of fact, it was finally surrounded by rooms on all four sides; later another atrium was added with the rooms around it, and often a garden with a colonnade as well.

In the Augustan period, the home, like everything else pertaining to the art and life of the Romans, was affected by the penetration of Hellenistic ideas, and a court surrounded by columns was added. This was the arrangement of the so-called House of Livia on the Palatine. It was the residence of some person closely connected with the Imperial family, possibly Livia or Germanicus, and was preserved because of the veneration in which it was held, although it was embodied in the great buildings which grew up around it. In the largest of the houses of Pompeii, the so-called House of the Faun, we see the same two features. There are two doors opening on the street. One is the entrance to a small vestibule leading to an atrium of the traditional Roman type with an *impluvium* in the centre. The other is at the end of a corridor and leads to a court surrounded by a colonnade in the Greek style.

The House of the Faun is really a palace. It has another larger court in the rear which is almost as wide as the house itself. On three sides of this court are living rooms and behind it, a large garden which also has a colonnade. It is interesting to note that the progressive owner of such a splendid home should take pains to preserve the one typically Roman feature, the atrium, although he had accepted the newer Greek fashion in the other parts of his handsome dwelling (fig. 673).

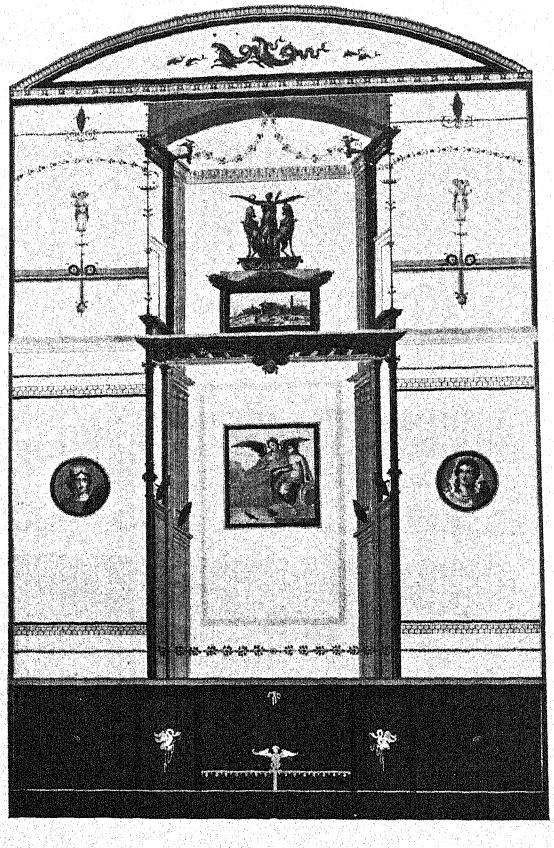


Fig. 676. — Second, or *Architectural style* of mural decoration. POMPEII.

The atrium and *triclinium* of the houses of the Republic were sometimes ornamented with marble up to a certain height, but oftener with painted stucco for economy's sake (fig. 674). This was richly painted. The wall either was or pretended to be of colored marble with painted mouldings. Frequently doors and pilasters were painted in, but they preserved the effect of a wall decoration. This is known as the first style of Roman decoration, and indeed it may have been of Hellenistic or Alexandrian origin. As these Roman styles of decoration have been studied at Pompeii more than elsewhere, they are called Pompeiian styles of mural decoration. The first Pompeiian style, then, is called the *Incrustation style*, derived from *crusta*, a slab of marble (fig. 675).

The second style of decoration of the Pompeiian houses appeared somewhat later than the *Incrustation style*. It is called the *Architectural style* because it consists of an architectural design in which an effect of perspective is partly achieved. The idea is logical as the columns and other architectural features really seem to be detached from the wall and create an impression of depth, making the room appear perceptibly larger (fig. 676).

The second style is evidently derived from the first. In the earlier Republican houses the decoration is very plain and merely represents panels, etc. But architectural features were soon introduced in order to obtain a perspective. The decoration of the House of Livia on the Palatine represents a transition from one style to the other, for some parts are in the Architectural style, while others, like the *triclinium*, are painted in the Incrustation style. There is a charming mural design consisting of a combination of pilasters and garlands of leaves and fruits (fig. 675), similar to those from the interior of the *Ara Pacis*.

The Architectural style became more and more accentuated as time went on. The columns were made to stand out in a more realistic manner and between they painted landscapes or windows with figures in the background. To carry

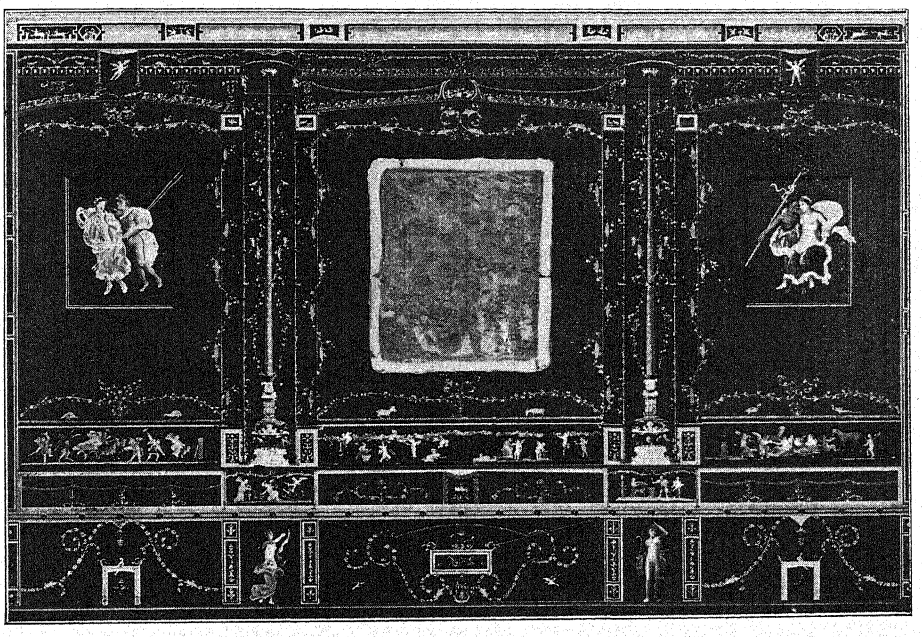


Fig. 677. — Third, or *Ornate style* of decoration. POMPEII.

out the idea more completely, the entire wall was finally divided into panels between the painted columns or pilasters, and in each panel was an elaborate composition. In one of the Imperial villas situated outside the walls of Rome a rather exaggerated effect is produced. The entire wall is ornamented with the picture of a flowery thicket. Graceful trees rise to the ceiling, and among them are birds of many colors. This can hardly be called the Architectural style, but the decorative principle is the same. It is an attempt to make the room seem larger by means of the mural decoration.

The third style of Roman mural decoration is named the *Ornate style*. Here the illusion of depth is no longer attempted. The whole wall has a uniform tone of white, black, or the bright red called Pompeiian red. From this background stand out a thousand miniature decorations (fig. 677). There are friezes of garlands, vertical bands of the same intertwined, masks, little baskets, and especially, hanging draperies. These are all harmoniously arranged, their colors softening the vivid tone of the wall itself. The richest elements of the *Ornate style* are the bands. These are ornamented with Cupids playing and scenes of a caricatural nature. It is very probable that such friezes had their origin in the paintings on glass which, as we have already seen, were a feature of the interior decoration of Alexandria. It is difficult to explain in any other way the almost microscopic fineness of detail which seems rather unsuited to a fresco. The *Ornate style* seems to have been the fashion during the reign of Nero, for the fragments of stucco and the frescoes of his Golden House preserve traces of this third system of mural decoration. This building was converted later into the basement of the Baths of Titus (fig. 678).

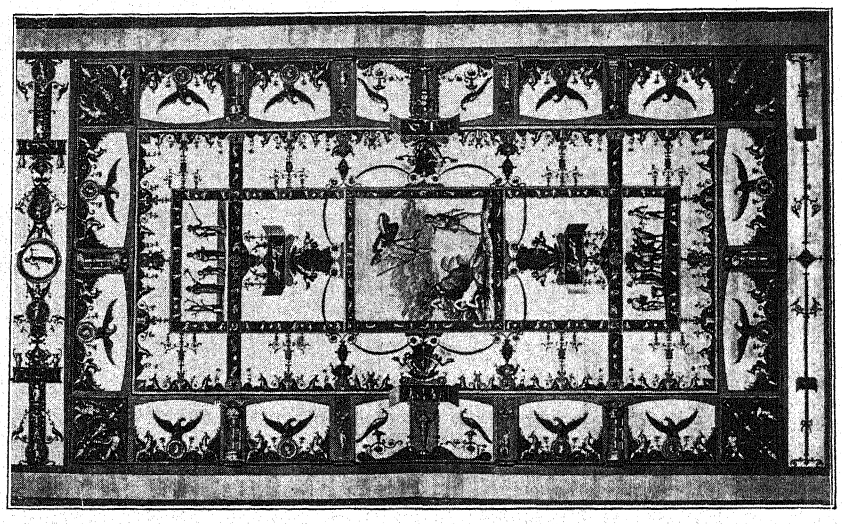
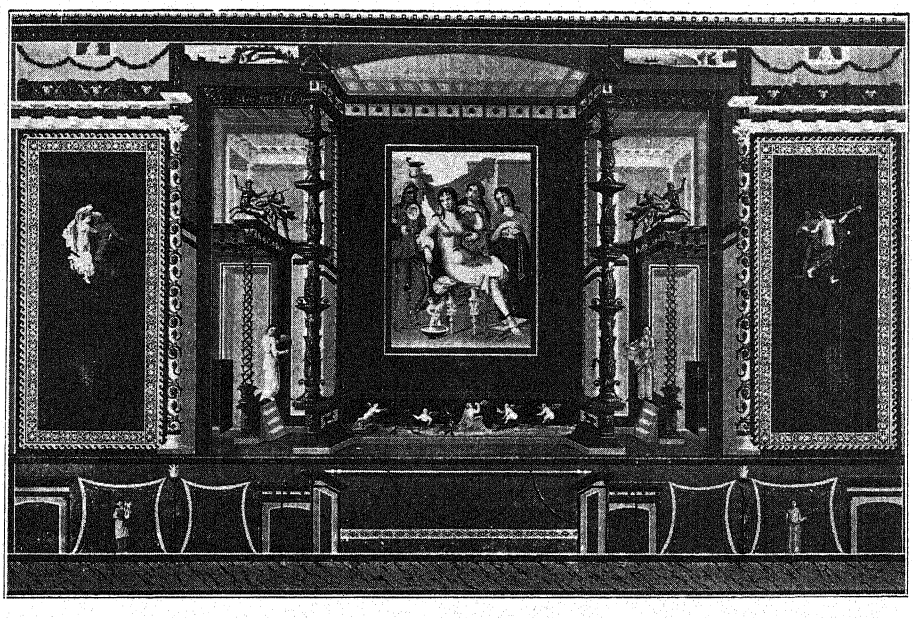


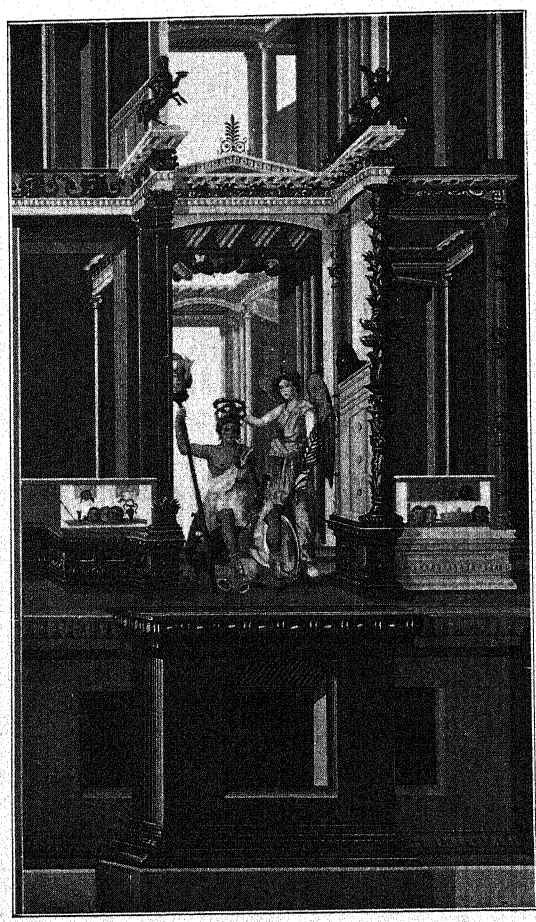
Fig. 678. — Fresco in the Golden House of Nero. Third, or *Ornate style.*

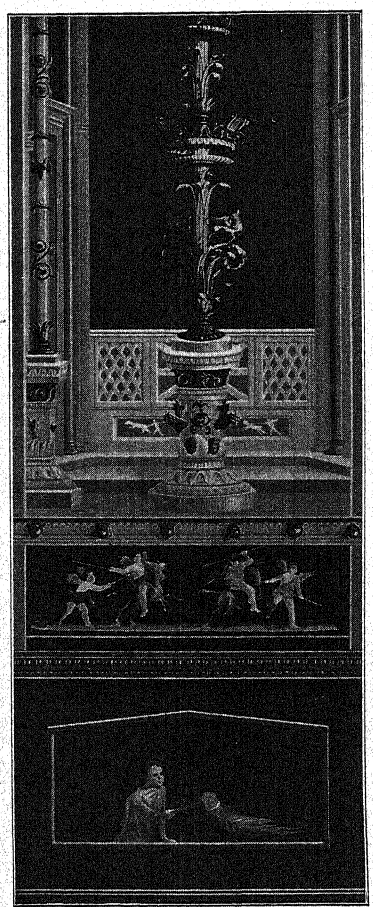
The paintings of the Golden House were discovered in the time of Raphael and Michael Angelo, and they exerted a powerful influence upon the decorative styles of the Renaissance during the sixteenth century. As these decorated rooms were discovered under the Baths of Titus and below the level of the ground, they form a series of grottoes, and for this reason some of their ornamental features were called *grotesco,* or grotesque. The elements of Renaissance decorative desings were largely derived from the *Ornate style*, because most of the other mural decorations at Rome and those of Pompeii were as yet unknown, with their vast store of decorative themes of the various Roman styles.

Fig. 679.—Woman playing the lyre. Bosco Reale.

There was also a fourth style of mural decoration. This was adopted during the last days of Pompeii, that is, about the end of the first century A.D., and is the style known as Illusionism. It makes no pretension of naturalness as do the first and second styles. To obtain a richer effect, architectural elements are painted in, little columns, friezes, windows, etc., but







Examples of the fourth, or *Intricate style*. POMPEII.

they are represented in a fantastic and intricate fashion utterly foreign to realism. The columns are extremely slender, and there is an intricacy of design which sometimes has a charm all its own. (Plate LII.) Some of the features ot this style show very delicate imagination. At times the columns of the fantastic little temples are supported by small animals; Cupids climb among the shoots and tendrils; and the leaves and twigs curve in graceful spirals as in the fine metal-work of today. Its beauty is largely due to the many vivid colors which come and go among the multitude of forms comprised within so small a space.

Fig. 680.—Sacrifice of Pentheus. Pompeiian fresco.

It must be admited that these four styles of decoration did not always succeed one another chronologically. We have seen in the House of Livia on the Palatine that two of them occur in the same building. Nevertheless, in a general way, they occur in the order in which they are given here. They are often useful in aiding us to determine the period of the house in which they are found, for there are certain facts concerning these styles which can be depended upon. We know that the second style was contemporary with Augustus, the third with the reign of Nero, and the fourth with the destruction of Pompeii. In this city a number of unfinished houses were discovered which were being decorated in the fourth style when the city was destroyed.

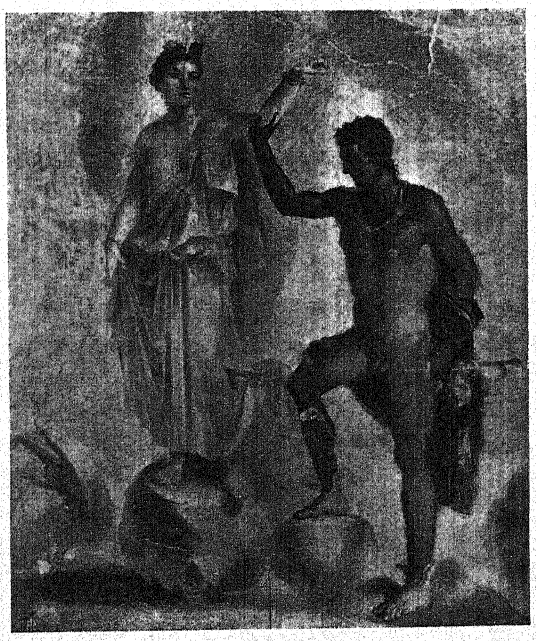


Fig. 681.—Perseus and Andromeda. Pompeiian painting. *(Museum of Naples.)*

In both the third and fourth styles the centre of the panel was occupied by a reproduction of some famous Greek painting. This had been taken from a copy, which, in turn, had been recopied many times. Nevertheless, these small painted panels on the walls of the houses of

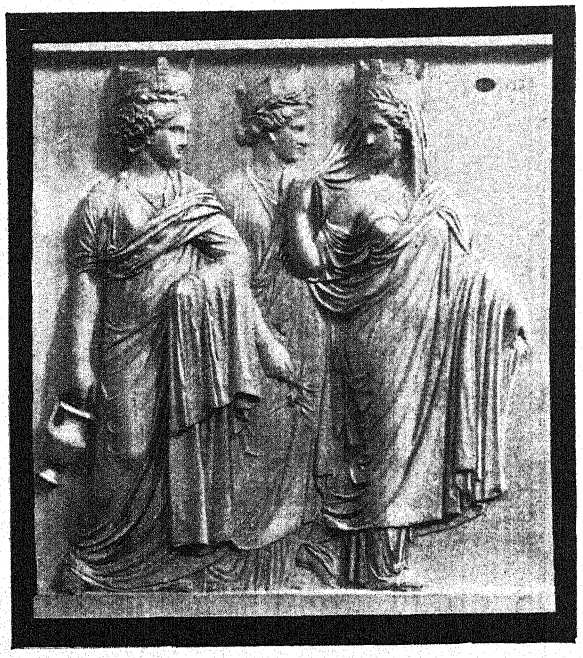


Fig. 682. — Relief personifying three cities. *(Louvre.)*

Pompeii are often the only copies we have of famous lost works. It is owing to them and to the data furnished by vases and mosaics that we are able to form any idea of what the Greek originals really were (fig. 680 and 681).

These Pompeiian frescoes should, of course, be taken with much caution in our study of the older Greek paintings. The copyists often altered and mutilated these classical compositions in order to adapt them to the size and shape of their own panels. We have already seen how in the pompeiian fresco, nothing but the figure of Agamemnon remains of Timanthes' painting of the sacrifice of Iphigenia. Often the painter made use of a well known sculptural theme, and by painting a statue or a relief a picture was made representing the same subject. Thus in the panel reproduced in figure 679, the picture of a woman playing a lyre is taken from a sculptural type. The statue of a seated figure was discovered at Pergamum which is evidently the model which the painter had in mind when he decorated the house in Pompeii. The picture in figure 681 represents Perseus and Andromeda as we have already seen in the Augustan relief in figure 651. In the painting, however, Perseus has the posture characteristic of the school of Lysippus, so the Pompeiian painter had more than one sculpture in mind when he painted this picture. There is reason, however, to believe that there must have existed an older picture of Perseus and Andromeda which influenced both sculptors and painters in their compositions based upon this subject.

We will now pass on to the sculptures, and especially the portrait statues of this period.

In the *Ara Pacis* and other monuments of the Augustan period, we have already noted the detailed realistic treatment and the balanced composition which characterized their monumental sculptures. Mention has also been made of the historical nature of certain works and of the personification of rivers, springs and cities. Sometimes these personifications are not of a historical character. The art of Rome lost in certain cases its commemorative character and the artists and their public took pleasure in representations of the new local

deities, without anything definite in mind, just as the Greeks sometimes represented anew the abstract conceptions for which the Olympian gods stood. An example of this is the marvellous relief in the Louvre, discovered on the Appian Way, in which we see three matrons crowned with towers. They represented three cities; one with a pitcher symbolized a city with an abundant water supply; another has ears of grain; and a third adjusting her mantle personifies a city noted only for its pomp and love of display (fig. 682).

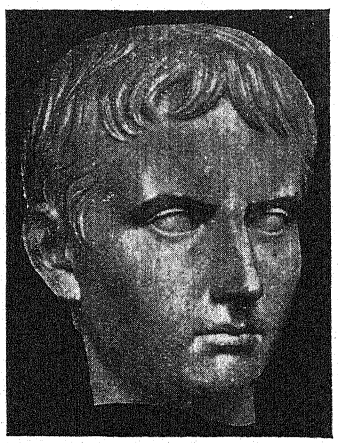


Fig. 683.—The young Octavian. Discovered at Ostia. *(Vatican.)*

Mention has already been made of the importance of portrait statues in Hellenistic sculpture. In Roman art, portrait sculptures become more and more frequent and are conceived with a lofty realism. The individual traits of the subject are expressed with a certain fineness. The Etruscan realism is combined with a a severity of style which gives these portraits a nobility all their own. Still we can not say that the likeness was sacrificed in order to produce this effect. The head of the young Octavian found at Ostia has an earnest expression that seems almost precocious. We see already the thin cheeks and concentrated gaze of the first Emperor (fig. 683). The head from Ostia is that of a boy of only thirteen or fourteen. In a bronze head found near Meroe in the Sudan, we see the youthful Emperor at the age of twenty-five or thereabout. The features are the same and the hair hangs limply over the forehead. This appears to be a family portrait sent to a friend, possibly the governor of this distant province (figure 684). It is rather remarkable that a portrait of the youthful Octavian, whom fortunate circumstances made the new master of the world, should have been carried to that far-off corner of the Roman Empire beyond Nubia into which the outposts of modern civilization have only recently penetrated.

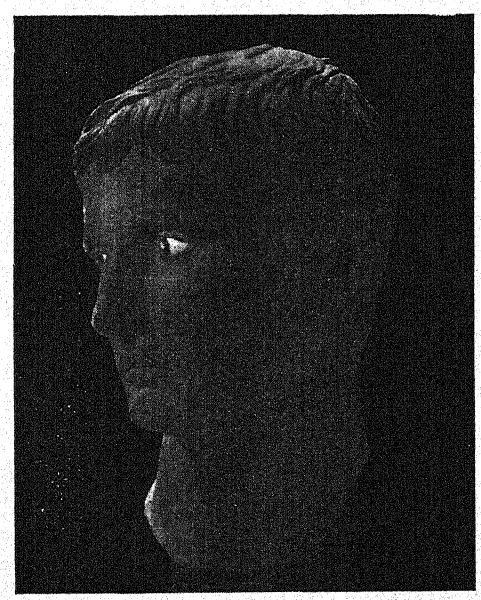


Fig. 684.—Augustus as a young man. Discovered near Meroe. *(British Museum.)*

A later portrait of Augustus, represented as high priest, was discovered in 1909 on the Via Labicana. Some of the coloring of this sculpture is still preserved (fig. 685).

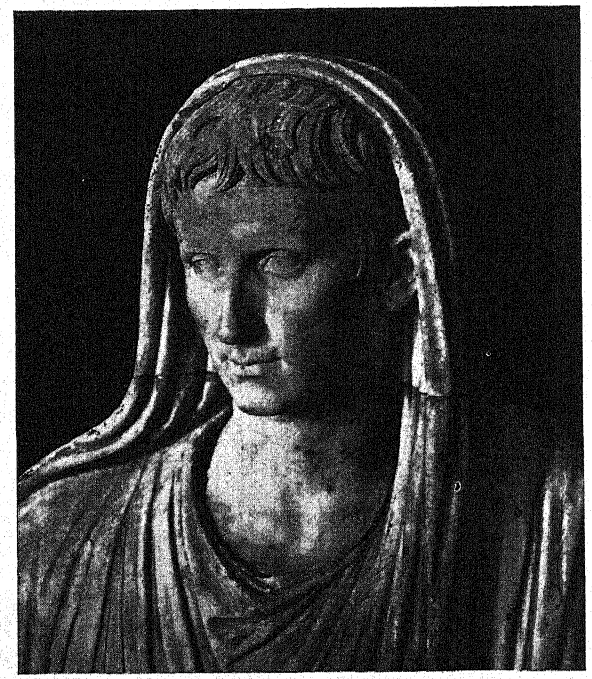


Fig. 685. — Portrait of Augustus with priest's mantle. Discovered in the Via Labicana. ROME.

The head is covered by the folds of the mantle of a priest and the face has a more reflective expression than any other portrait of the first Emperor. It was a fortunate conception and was a model often imitated by his successors. The Caesars of his own family and still more often the philosophical emperors of the Antonine dynasty took pleasure in seeing themselves represented with this plain mantle over their heads. This mantle was the only distinguishing mark of the high priest who was also the head of the State.

There is still another portrait of Augustus, this time much older. His attitude is one of command. He is dressed as a general and appears to be addressing his troops. His armour is ornamented with handsome reliefs which symbolize his glorious reign. Gaul and Spain are humiliated; the barbarians from beyond the Euphrates restore the Roman eagles captured from the legions of Crassus; and the Chariot of the Sun passes in its course illuminating the great days of Augustan Rome. This statue is one of the most precious possessions of the Vatican and is called the "Augustus from Prima Porta," because it was found in the villa of the Empress Livia outside the walls of Rome. The reliefs on the armour connect the date of this statue with that of the *Ara Pacis*. It is evident that it is a free imitation of the Greek. The Augustus from Prima Porta resembles in its attitude the Doryphorus of Polycleitus. As in the latter, the weight of the body rests upon the right leg and is balanced by the left. Instead of a spear, he carries the baton of a general. The statue from Prima Porta is the first of a new type of portrait statues of emperors in a standing position. Many such have been found which were set up to glorify the emperors and their achievements, especially in the provinces. They bear armour ornamented with reliefs and stand in the attitude of official speech to their troops.

These are the most famous of the portraits of Augustus, but there were a large number of marbles in the various provincial museums which bore his ikeness. They represent him up to the time of his early old age, when the wasted brow which is characteristic of him seems hardly able to bear the laurel

Fig. 686. — Augustus as Imperator. *(Vatican.)*

Fig. 687. — Modesty. *(Vatican.)*

wreath symbolizing his glorious reign. Although we have so many portraits of Augustus, there is, unfortunately, not one of Livia of which we can be certain. There is the Ravenna relief in which the Empress is represented at the side of her husband, but the face has been destroyed. In the Naples portrait the style is extremely bad. A third in Aquileia is very small. Possibly our best idea of Livia may be gained from the diademed statue in the Vatican which has been named "Modesty." It is probably the idealization of some Imperial lady, and it certainly dates from the period of Augustus (fig. 687). Its attitude is that of the Greek grave-statues wearing a mantle of the style of the fourth century B.C., but its severity is so Roman that it was at first believed to be the personification of the womanly virtues and the name Modesty was arbitrarily given to it.

We have a number of good originals of portraits of Tiberius, the son of Livia who was adopted by Augustus. The seated figure in the Vatican is also the first of a new type of statues of glorified emperors which became very popular as time went on, although it is hardly in keeping with the sickly nature and effeminate face of Tiberius (fig. 688). The figure is partly nude, wearing only a mantle draped over the shoulders and knees. In one hand is a *gladius* and in

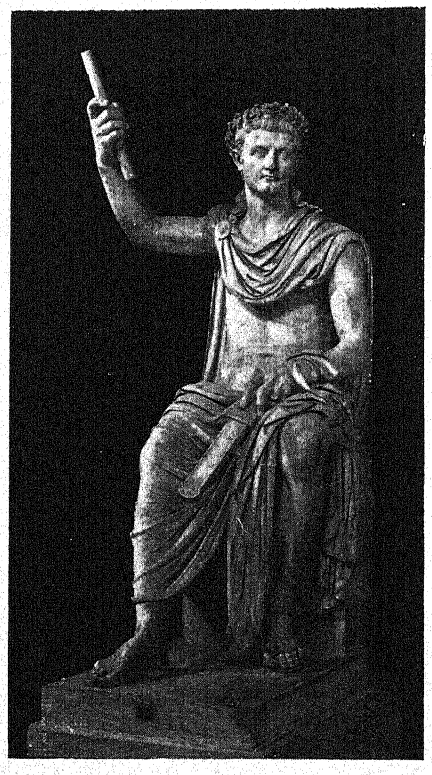


Fig. 688. — Tiberius. *(Vatican.)*

Fig. 689. — Gaius Caesar. *(New York.)*

the other, the imperial scepter. There are also a number of portraits of the young princes, Gaius and Lucius Caesar, the grandchildren of Augustus and for a time the heirs to the throne (fig. 689).

Portrait statues of Claudius in the heroic attitude of a great deified monarch have also come down to us as well as other standing figures. In the former we see the same scepter and mantle which falls in few folds over the lower part of the body. In these statues only the attitude is idealized. The faces all have the strong family resemblance so characteristic of the successors of Augustus and their relatives. Tiberius curls the thin lip we know so well. Claudius, with his large eyes which almost protrude, does not gain majesty from the rather pedantic air with which the sculptor has attempted to give him dignity. We have a number of busts of Nero which are most interesting. In all, he twists his head on the enormous neck with its curly immature beard. All the Claudian Emperors and the men of their families, with the exception of Nero, are smooth shaven and their hair hangs limply over their foreheads in the manner characteristic of the family. It is evident that patricians and courtiers cultivated the same appearance in flattering imitation. In the portrait of Drusus (fig. 690), we recognize another member of the Imperial family with the same unkempt hair over the forehead, but the chin and nose of the divine Augustus have degenerated.

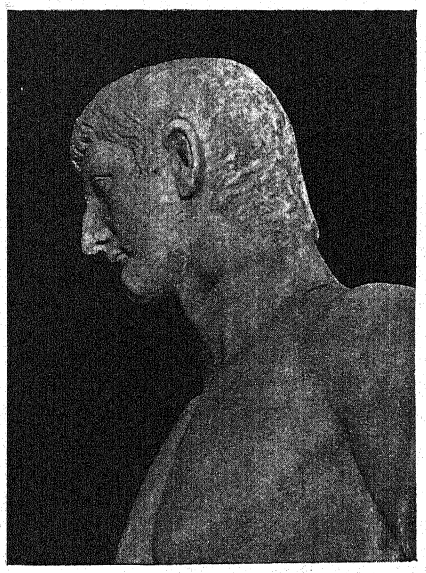


Fig. 690. — The young Drusus. *(Lateran.)*

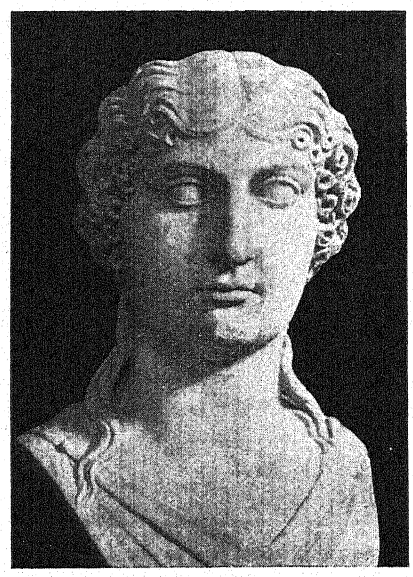


Fig. 691.—Agrippina the younger. *(Vatican.)*

The same manner of wearing the hair over the forehead appears in the portraits of Agrippa, who was connected with the family by marriage only, as well as in those of others who were not allied to the Imperial family by ties of blood or marriage. We might almost say that this arrangement of the hair was characteristic of the portrait heads of the first period of the Empire. Another important detail was the smooth eye-balls like those of the Greek portraits. The pupil was not carved until the time of the Antonines.

Other portraits of members of the Imperial family are those of the two Agrippinas, one of the elder Agrippina who was the daughter of Agrippa and the wife of Germanicus, and the other of the dissolute wife of Claudius and the mother of Nero. The former still wears the long ringlets and the short tresses at the nape of the neck which were the style during the last years of the Republic (fig. 692). The hair of the latter is parted as in the portraits of Livia, which is characteristic of the portraits of the period of Augustus and his immediate successors (fig. 691).

Fig. 692.—Agrippina the elder. *(Vatican.)*

We see the same coiffure on the beautiful Antonia, the mother of Germanicus. She is represented as the nymph, Clytia, rising from the calyx of a flower (fig. 693). This portrait bust of Antonia

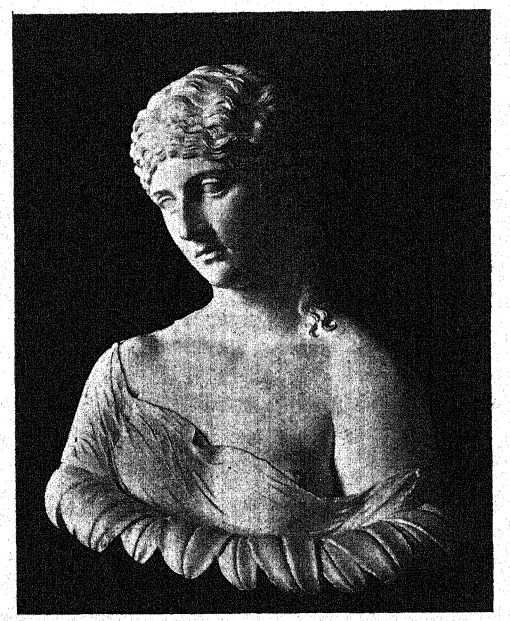


Fig. 693. — Antonia, wife of Drusus.
(British Museum.)

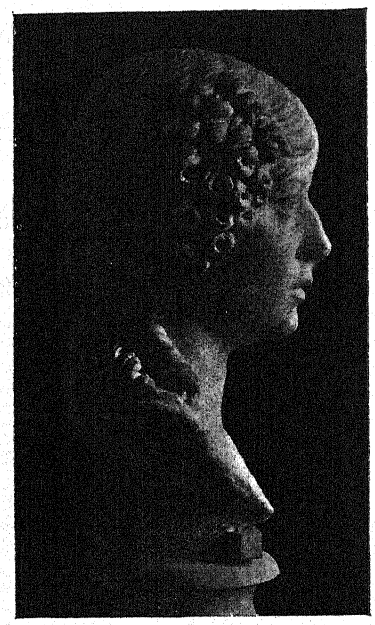


Fig. 694. — Portrait of Minatia Polla.
(Museum delle Terme.)

in the British Museum is the most beautiful of all the Roman portraits. It is the expression of every womanly grace. One of the breasts is partly uncovered, but none of the modesty and nobility of a patrician lady of Rome is lost thereby. This conception of a royal personage partly transformed into a flower is a marvelous combination of idealism with realistic details, such as the arrangement of the hair, which is entirely in the prevailing fashion of the time. Another beautiful portrait head is that of the unknown Minatia Polla, a young girl who died at the age of fourteen according to the inscription found in the burial chamber with the sculpture (fig. 694).

All these personages have been identified not only by inscriptions but even more completely by medallions and coins. Even in the case of persons of secondary importance connected with the Imperial family it was not unusual to stamp handsome portraits of them or of their relatives upon medallions or coins. Upon the reverse side was some allegorical allusion to the person or the relief of some object closely associated with the deceased, if the coin or medallion was in memory of the dead. These were often made in memory of a wife or son who had passed away before their time. Upon the reverse side of the medallion of Agrippina we see the picturesque detail of the elegant carriage in which she was accustomed to travel.

In Rome, the new capital of the world, resided now all the great masters of the minor arts. From Alexandria and Pergamum came mosaic workers, engravers of gems, and gold- and silversmiths. In these arts Rome did no more than continue the work of the Alexandrian schools. Both nobles and wealthy plebeians

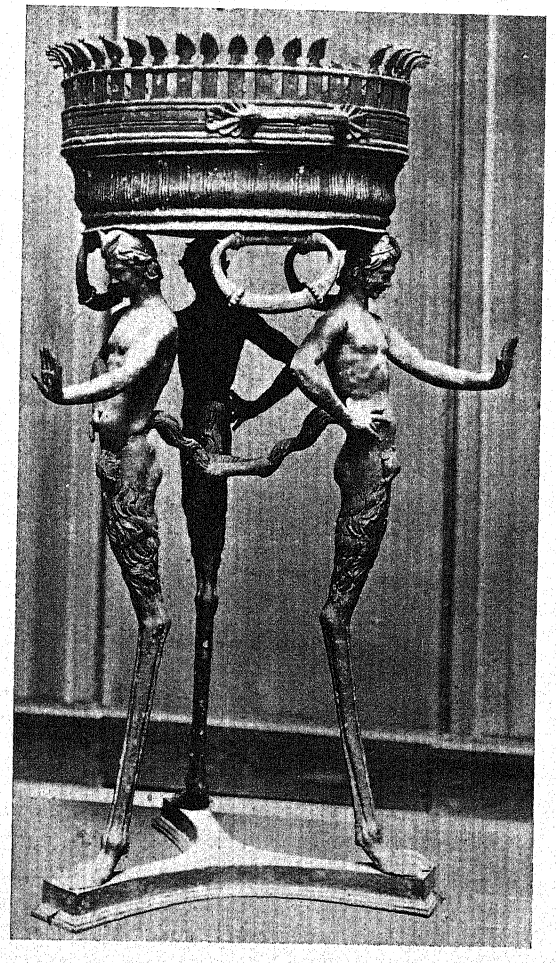


Fig. 695. — Pompeiian brasier. *(Museum of Naples.)*

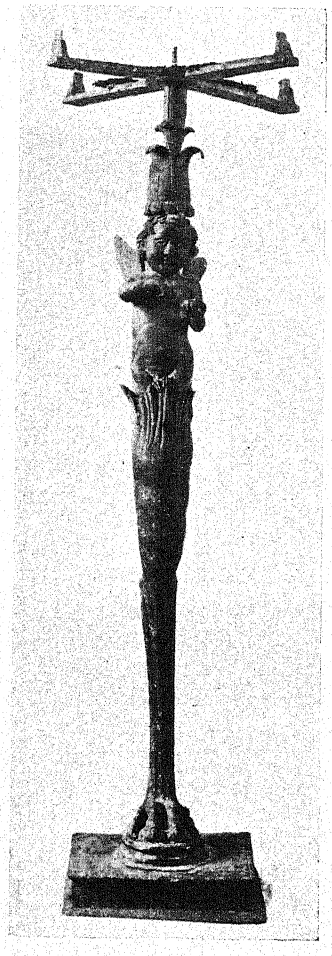
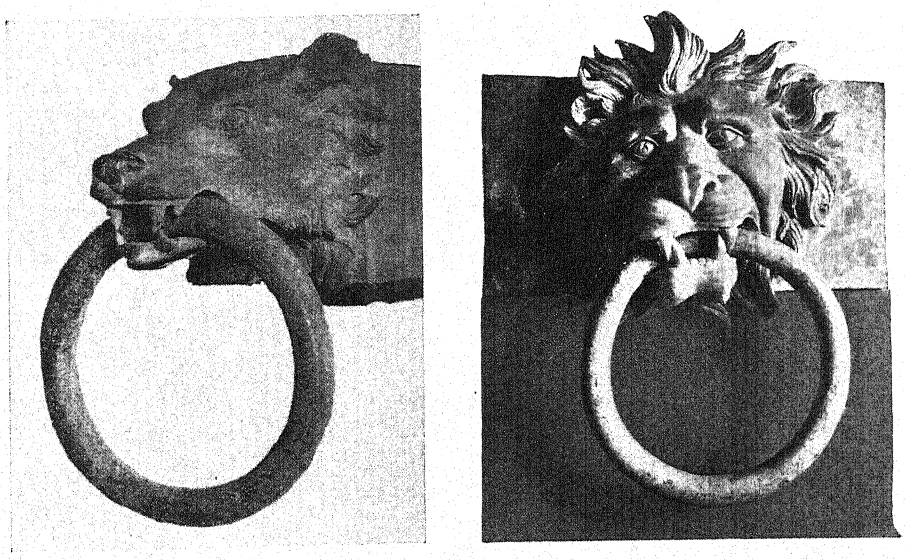


Fig. 696. — Lamp. POMPEII.

were eager to possess handsome silver plate. A marvelous treasure was discovered at Bosco Reale near Naples. It consisted of a large number of silver cups and other exquisite plate which probably belonged to some member of the Imperial family, because one of the pieces bears a representation of the triumph of Tiberius. Another treasure found at Hildesheim shows that the provincial officials and generals defending the German frontier also required a handsome table service, even in an isolated military camp far from the capital.

The smaller household furnishings of bronze, cast or done in repoussage, show us how exquisite was the work of the Imperial artists who manufactured them. Among the numerous objects of this sort found at Pompeii there is a brasier supported by three fauns which is particularly fine (fig. 695). Each faun holds out one hand with the instinctive gesture of one who tests the air. They also cast bronze jars and beautiful amphorae with masks of the Alexandrian



Figs. 697 and 698.—Rings of the Tiberius' galley found at the Lake of Nemi. *(Museum delle Terme.)* ROME.

god, Dionysus, supporting the handles. Table legs and lamp supports end in a lion's paw which is typical and with a head above (fig. 696).

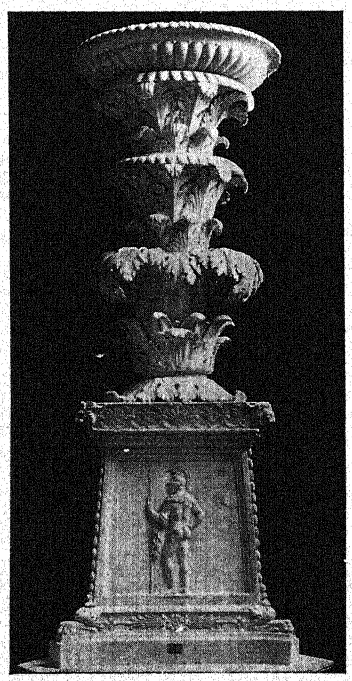


Fig. 699.—Candelabrum Barberini.

Perhaps the handsomest bronzes that have come down to us from this period are those which ornamented the galley of Tiberius, sunk in the Lake of Nemi. This is a small crater in the Alban hills which forms a charming circular lake called the "mirror of Diana." The vessel was a pleasure boat ornamented with bronzes and precious marbles (figs. 697 and 698). Some of these have been rescued from the bottom of the lake, among them some rings and the head of Medusa which ornamented the prow.

Scattered in various museums there are also beautiful marbles dating from this period of the Empire, which still bear the stamp of Hellenism. Of such is the delicate candelabrum decorated with acanthus leaves, formerly in the Palazzo Barberini and now in the Vatican (fig. 699). The large receptacle found in the garden of Maecenas is a reproduction of an Alexandrian type (fig. 700). In the collection of antiquities belonging to the City of Rome there are fragments of a similar fountain. A

marble horn ends in a fantastic animal form, and at the back of its body there is an opening from which the water gushed forth.

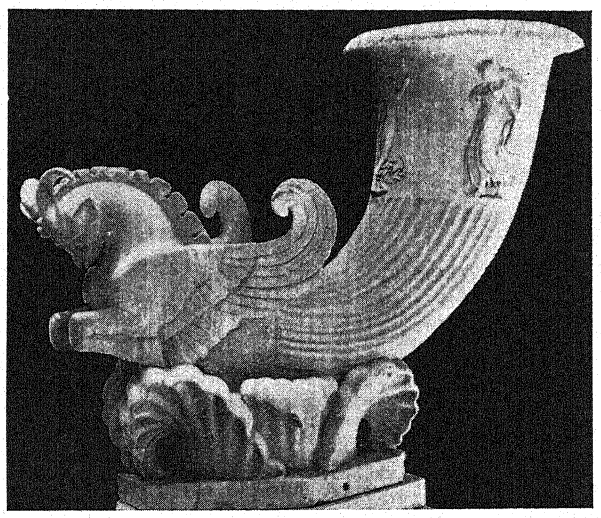


Fig. 700. — Fountain from the garden of Maecenas. *(Capitol.)* ROME.

Other objects which are less unusual are gracefully ornamented in the Hellenistic style. The relief is not too prominent and the zones of decoration are divided by bands of Grecian frets like the *Ara Pacis*. We see this in the marble vases and jars of this period (figs. 701 and 702). On some, the curved surface is ornamented with groups of satyrs and maenads who joyously pursue one another as they carry on a mimic combat with bacchic wands. Others are decorated only with foliage forms, the preference being given to laurel, plane, olive and vine branches.

We no longer know the names of many of the great artists whose patrons were the Imperial family and the Philhellenic patricians of the period of Augustus and the Claudian Emperors, and who produced such a quantity of beautiful work. We do know of two Greeks, Sauros and Batrachus, who worked under Augustus and who may have been the architects of the *Ara Pacis*. Pliny mentions a certain Dioscorides from Asia Minor who produced cameos of considerable merit. To this artist is ascribed the Grand Camée de France in the Cabinet de Médailles at Paris, repre-

Figs. 701 and 702. — Marble vases. *(Vatican.)*

senting the glorification of Germanicus. The deified Augustus sits with Livia in the midst of a group composed of other members of the Imperial family beneath the great Roman general who ascends to Olympus led by Victory. In a lower plane we see the barbarians conquered by the hero in his campaigns (fig. 703). A similar composition, divided into two scenes, is seen in a cameo at Vienna which represents the triumph of Tiberius. The style of the latter is inferior and there is no doubt that the technique of gem-carving deteriorated rapidly at Rome.

Summary. — During the period of Augustus we see the definite triumph of Hellenistic art at Rome. It is difficult to distinguish between what is Greek and what is Roman in the delicately idealized series of reliefs. The *Ara Pacis* may be considered the first great monument of Roman art. It is a small open structure enclosed by another wall forming a court surrounded by a colonnade. On the upper zone of the inner structure is a representation of the imperial family, the patricians and the senators in solemn procession, attending a ceremonial sacrifice. Below is a zone of foliage decoration, the realism of which is characteristically Roman. The principles governing Augustan art are seen in a temple at Tarragona and in the arch at Rimini. The most characteristic temple of this period is that at Nimes which still contains many traditional Latin structural features, particularly its high base or *podium* and the absence of a rear portico. Many public works at Rome date from this period: the Claudian aqueduct, the Baths of Agrippa, as well as the monumental tombs such as the pyramid of Caius Cestius, the mausoleum of Caecilia Metella, and the tomb of Eurysaces. The Republican Roman house was derived from the Latin hut with an opening in the roof. For this reason the most important feature was the *atrium*, or living room, which had an opening in the middle of its roof. The Greek court soon took the place of the atrium. The walls were decorated with frescos, in which we can distinguish four periods or styles, their object being to give an illusion of spaciousness. A similar impressionism is noted in painted compositions of figures. Effects are sought by the use of color masses. In addition to the new personifications of rivers and cities, sculpture is seen at its best in the portrait statues of the personages of the Imperial family. There were many statues of Augustus; those of Livia are scarcer; but we have many excellent portraits of Tiberius, Claudius and Nero, as well as of the women of the imperial family, such as Antonia and Agrippa. The minor arts produced many beautiful works, such as bronzes, marble ornaments and carved gems.

Bibliography. — Th. Schreiber: *Die Wiener Brunnenreliefs,* 1888. — Fr. Wickhoff: *Die Wiener Genesis.* (English translation, *Roman Art,* 1900.) — E. Strong: *Roman Sculpture,* 1907. — E. Petersen: *Ara Pacis Augustae,* 1902. — Fr. Studnizca: *Zum Ara Pacis,* 1905. — E. Coubeaud: *Le Bas-relief Romain à représentations historiques,* 1899. — J. Bernouilli: *Römische Ikonographie,* 1894. — A. Mau: *Geschichte der decorative Wand-malerei in Pompei,* 1882. — G. Rodenwaldt: *Die Komposition der pompejanischen Wandgemälde,* 1909. — F. Barnabei: *La villa pompeiana scoperta presso Boscoreale,* 1901. — F. Duhn: *Pompei, eine hellenische Stadt in Italien,* 1907. — P. Gusman: *Pompei,* 1905. — L. Lanciani: *Il Pantheon e le Terme di Agrippa,* 1882. — De Romanis: *Le antiche camere delle Terme di Tito,* 1822. — P. Malfatti: *Le navi romane sommerse nel lago di Nemi,* 1896.

Fig. 703. — Grand Camée de France. *(Cabinet de Médailles.)* Paris.

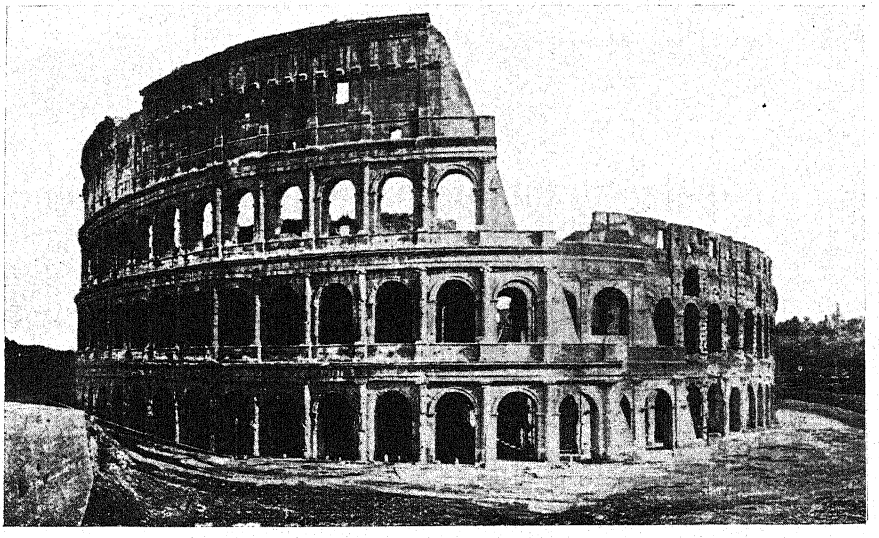


Fig. 704. — The Flavian amphitheatre. ROME.

CHAPTER XIX

ROMAN ART UNDER THE FLAVIANS AND ANTONINES.
THE COLISEUM. — THE ARCH OF TITUS. — TRAJAN'S ARCH AT BENEVENTUM.
TRAJAN'S COLUMN. — THE BUILDINGS OF HADRIAN. — PORTRAITURE.
THE EVOLUTION OF ROMAN DECORATIVE ART.

After the death of Nero and the wars which followed the reign of the last of the Claudian Emperors, another great family of emperors and lovers of art inaugurated the most glorious period of the Roman Empire. Previous to his accession to the throne Vespasian, the first of the Flavian Emperors, had long governed the provinces of the Orient. The campaigns of Titus also were largely in the Orient, the land of classic art and, more especially, of architecture. Domitian, the third of the Flavians, filled the capital with magnificent buildings during his long reign.

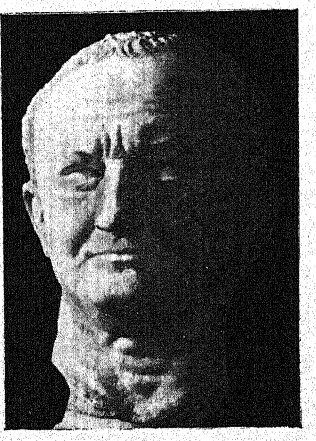


Fig. 705. — Portrait of Vespasian.

To find space for their great structures, the Flavians made use largely of the ground occupied by the Golden House of Nero. This youthful Emperor had spent the last years of his reign in erecting a series of structures that were fantastic to the point of insanity. He had turned the valley between the Caelian and Esquiline Hills into a lake, covered the Velia with the gardens in which

his colossal statue stood, and expropriated a great part of the land on these hills occupied by the residences of the patricians in order to enlarge his palace. These handsome pleasure houses with their gardens, now abandoned and falling into ruin, were utilized by the Flavian Emperors for their public works. Over that portion of the Golden House which lay upon the Palatine they constructed a new imperial palace which was smaller and used principally for public functions. They preferred to live in the old palace of Augustus which was still standing.

On the site of the gardens and where the Colossus of Nero stood, Vespasian and Titus constructed the Flavian amphitheatre, still today the largest of the ruins in Rome (fig. 704). It was elliptical in form as best suited to the combats with wild beasts and the gladitorial games for which the structure was destined. The amphitheatre is a type of building which we may consider genuinely Roman. The old Greeks took no interest in this form of entertainment which was more in keeping with the spirit of the Oriental nations. The spectacles of the arena are supposed to have been introduced by the Etruscans who brought this institution from their former home in Asia. Nevertheless, the shape of the building is derived from the Greek theatre. The amphitheatre is really nothing more than a combination of two theatres, and references exist to certain double theatres in which the stages could be made to disappear, thus converting the two into one amphitheatre. The tiers of seats extended all the way round and were divided horizontally by passageways or *praecinctiones*. The Flavian amphitheatre, the largest in the Roman Empire, was composed of four

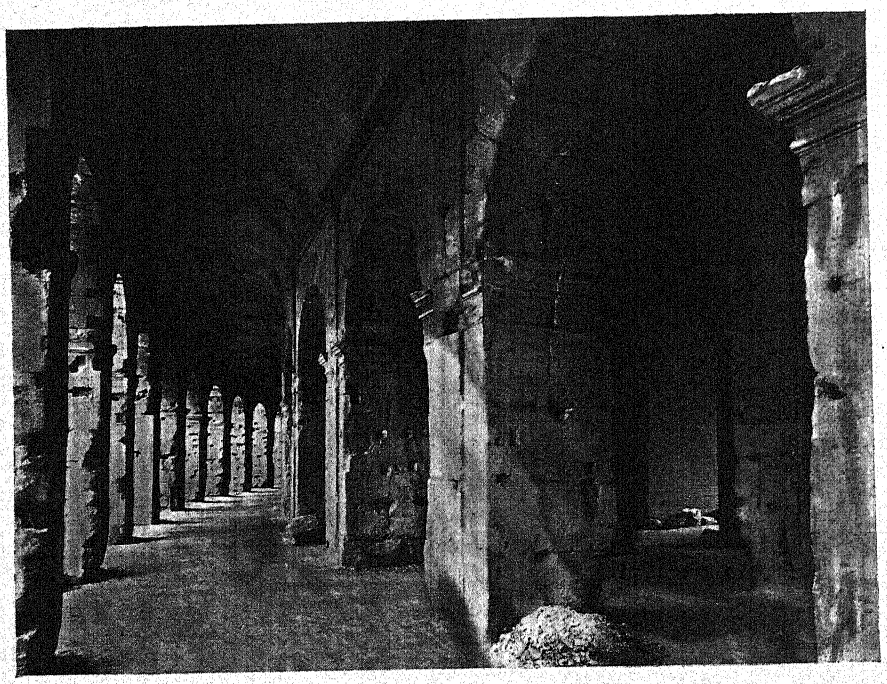


Fig. 706. — Lower arched corridor of the Colosseum. ROME.

Fig. 707. — Superimposition of the different orders of architecture in the Colosseum. Rome.

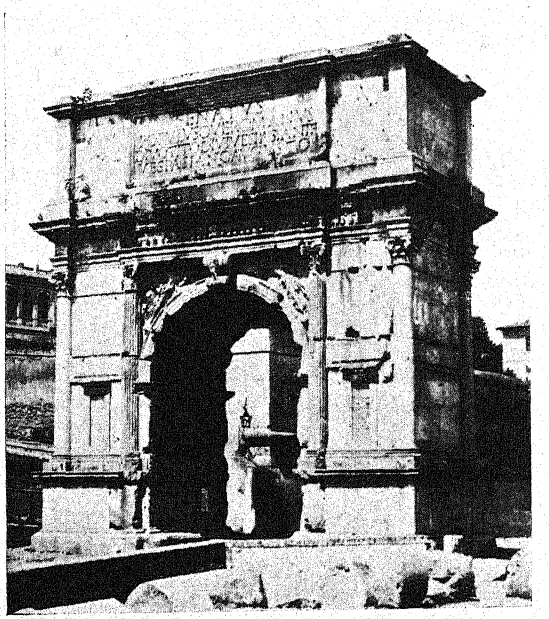


Fig. 708. — The Arch of Titus. Rome.

such orders of seats, and the highest of these was covered by a colonnade which ran round the entire top of the building.

This amphitheatre was constructed almost entirely of hewn stone. The vaults are of concrete, and there is a monumental open porch on the ground floor from which the stairways ascend to the upper stories (fig. 706). The stairways were arranged in such a manner that the amphitheatre could be emptied of its forty thousand spectators in a few minutes. The façade is an example of the same monumental type of architecture as the theatre of Marcellus with its elegant superimposition of the three orders of architecture. The lowest story is Doric, the second, Ionic, and the third and fourth, Corinthian, which relieves the monotony. The three lower stories consist of open arcades which lessen the effect of heaviness which such an enormous mass might otherwise produce (fig. 707).

Opposite this magnificent amphiteatre, now called the Colosseum, and in strong contrast to it, rises the graceful arch of triumph recording the victories of Titus in Asia. We know that it was completed during the reign of Domitian. Its imposing site upon a spur of the hill makes it a fitting entrance to the old Roman Forum. To commemorate their campaigns the Flavian Emperors were content with a small arch constructed on simple lines (fig. 708), and yet this monument was erected to signalize the memory of one of the most striking events in the history of the world, the fulfilment of the prophecy of the destruction of Jerusalem, which was accomplished in the year 70 A.D. The decoration of the exterior of the arch is not extensive; there are some reliefs on the frieze and in the triangles formed by the curve of the portal. But in the interior we see two reliefs which, although they are unfortunately somewhat mutilated, are a living testimony of the marvelous results achieved by Roman art under the Flavians. These sculptures belong to the class which we have called historical reliefs. On one side we see the quadriga and chariot of the Emperor passing by in triumph. Two figures precede it; one wearing a helmet and leading the horses appears to be the goddess, Rome; the other, which is partly nude and has lost its head, appears to symbolize the *Senatus* or the Roman people like the similar figure on the frieze of the *Ara Pacis* (fig. 709).

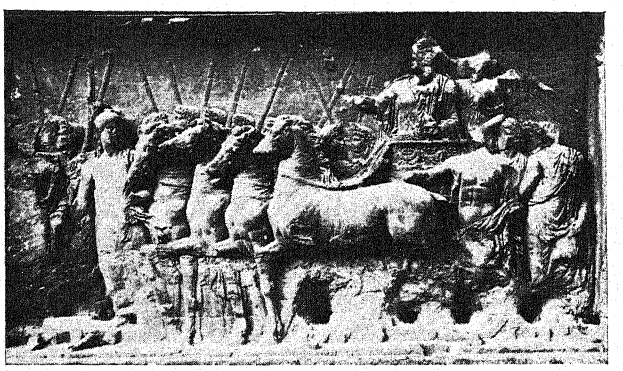


Fig. 709. — Relief of the Arch of Titus. ROME.
The quadriga of the Emperor.

On the other relief we see represented another part of the triumphal procession. A group of attendants bear the spoils of the Jewish Temple as trophies of the war. We see the golden table for the shew-bread, the two trumpets, the sacred vessels, and the famous seven-branched candlestick described by Josephus with its central stem supporting the other six spread out like the prongs of a trident and ending in a parallel line (fig. 710), A very interesting feature of these two reliefs is the happy combination of the figures in the full round in the foreground with those in low relief in the background. There is a space between the two which produces an extraordinary effect of perspective. There was little of this in the reliefs of the *Ara Pacis*, and still less in the Parthenon frieze in which all the figures were in the same plane. This method of treatment began in the Hellenistic period, but it was not developed until the Romans worked it out more fully in the reigns of the Flavians. The reliefs of the Arch of Titus were undoubtedly polychrome, and this contributed not a little to the illusory effect of perspective. These reliefs contradict the old theory of the uniformity of Roman art and its supposed slavish adherance to Greek methods. Not only did Roman architecture with its great vaulted roofs possess originality, but artistic technique never ceased to progress. In our study of styles of decoration we shall return to the works of the times of the Flavians and Antonines to note the improvement made in Roman decorative art during this period.

Some re-used material has been preserved in the walls of the Arch of Constantine which dates from an earlier period than that of the arch itself. Some of these blocks of stone bear medallions of unusual beauty and were carved in the time of the Flavians. These represent hunting scenes and a sacrifice (figures 711 and 712). It is not known what monument furnished them. They were long supposed to have belonged to the arch of Trajan or that of Hadrian, and it was thought that some of the figures could be recognised as members of the ramily of the latter, but they have recently been ascribed with more reason to the Flavian period. Although the sculptural compositions of the reigns of Trajan and Hadrian still display traces of the Hellenistic delicacy of the Augustan eliefs, they are less picturesque and have greater majesty; indeed, we may say that they are more Imperial in character. Like the reliefs of the Arch of Titus, these medallions on the Arch of Constantine may be considered the finest examples of Roman art of the latter part of the first century that have come down

Fig. 710. — Relief on the Arch of Titus showing the spoils from the Jewish Temple. ROME.

to us. Besides the monuments already mentioned, the Flavian Emperors erected many other important structures at Rome. Over another portion of the ruins of the Golden House they constructed the building now known as the Baths of Titus. A large equestrian statue was set up in honor of Domitian in the Forum, the temple on the Capitoline was restored, and a mausoleum was built on the Esquiline for the members of the Imperial family.

This magnificent building program was continued throughout Trajan's long reign. This great emperor was a native of Italica in Spain and was the adopted son of the Emperor Nerva whom he succeeded. Nerva reigned barely long enough to construct the Imperial Forum which still bears his name, and some of its imposing remains are still preserved. Trajan, however, whose reign lasted from 98 to 117 A.D., erected many magnificent buildings and monuments both at Rome and throughout the Empire. A typical example of the art of Trajan's period is the handsome arch of triumph at Benevento, the ancient Beneventum, on the highway leading to Brundisium. This was constructed in 114 A.D. to commemorate the paternal government of this emperor. According to the inscription the Roman Senate conferred upon him the title of Optimus Princeps (fig. 713). The reliefs on its outer walls and in the archway perpetuate the glory of Trajan, the perfect ruler, the just administrator and the generous father of the citizens of the

Figs. 711 and 712. — Medallions on the Arch of Constantine, taken from a Flavian monument. ROME.

Fig. 713. — Trajan's Arch. BENEVENTUM.

Roman Empire. This distinguished emperor is seen in the reliefs of the column in the Forum which bears his name, taking part in the long campaigns against the barbarians. Here, on the contrary, he is represented, not as the indefatigable general, but as the noble law-giver from whose hand flow innumerable blessings over the vast regions entrusted to his care by the immortal gods. To the left, on the upper part of the superstructure, or attic, is a relief in which the Capitoline triad, Jupiter, Juno and Minerva, look down upon the generous deeds of Trajan. In the other reliefs of this arch we see the granting of lands to veterans, the promulgation of privileges to provinces and the reception of delegations of merchants. Below are nude figures with anchors representing the minor gods of the ports who also witness the liberality of the Emperor (fig. 714).

Most interesting among these reliefs are those within the archway, comme-

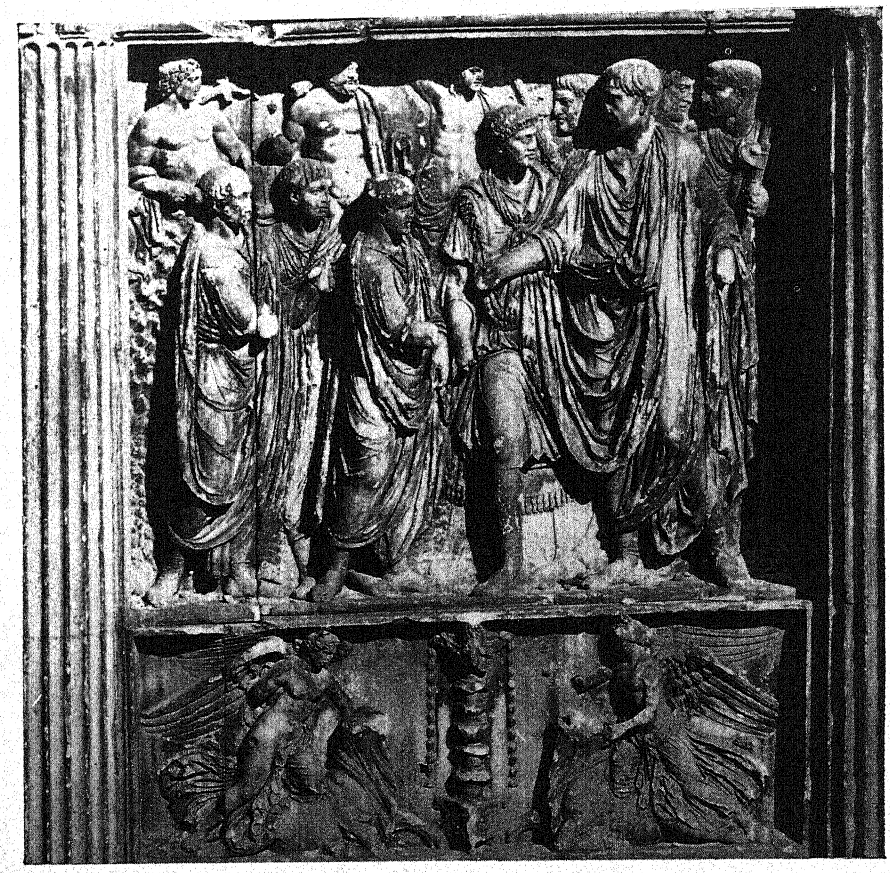


Fig. 714. — Trajan's Arch at Benevento. Trajan receiving the merchants.

morating Trajan's paternal government. In one of these he makes a sacrifice in honor of the era of peace, while in the other the populace, familiarly crowding around the Emperor's suite, acclaim his benefactions. The poor bear their children on their shoulders to the great law-giver who extends his hand above their heads with a paternal gesture.

In contrast to all this, as has been noted, his magnificent Forum at the foot of the Capitoline was constructed with the object of glorifying Trajan as a military leader, for it commemorates his campaigns against the Parthians and Dacians. The architect of this Forum was the Greek, Apollodorus of Damascus, and he probably directed the school of notable sculptors who carved its exquisite balustrades and reliefs. Innumerable fragments of surprising beauty from Trajan's Forum are now scattered among the churches and museums of Rome. Among these the most beautiful are the eagle in the Church of the Holy Apostles (fig. 1), the relief reproduced in figure 759 and the tablets which were re-used in the Arch of Constantine. This Forum possessed a grandeur that was almost Oriental (fig. 715). A triumphal arch (T) was the entrance to the colon-

naded court which constituted the actual Forum. In its centre was an equestrian statue of the Emperor. The court was flanked on either side by a semicircular structure and behind it was the Basilica Ulpia. The latter was divided into a central nave and four side aisles by rows of columns. At each end was a tribune or apse (U). Beyond the basilica were two libraries (W), and between them the court (V) in which the triumphal column was erected.

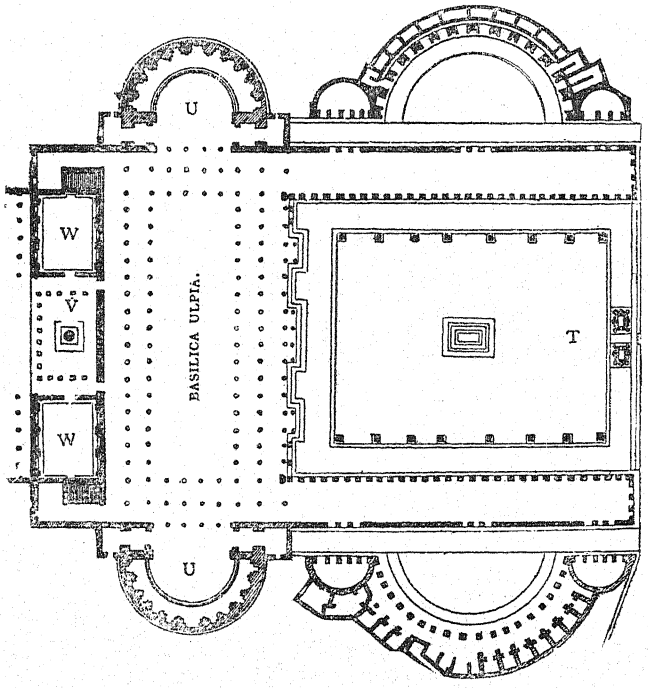


Fig. 715. — Plan of Trajan's Forum. ROME.

Inside the base of this column is a small chamber which contained the sarcophagus of the Emperor.

Behind the column was a temple dedicated to the deified Emperor. The entire monumental composition remained intact down to the time of the barbarian invasions and surely filled with awe the Teuton horde whose ancestors the great Emperor had conquered.

Few of the monuments of ancient Rome have been more completely destroyed than Trajan's Forum, but the great column above his tomb has been miraculously preserved with its spiral reliefs which bear the record of his campaigns on the Danube. Dante saw it there for as he sang in his *Divina Commedia:* "There, was recorded the lofty glory of the Roman Prince." Artists like Raphael and Michael Angelo drew the inspiration for their magnificent style from this monument. The latter said, as he viewed one of Titian's pictures, that the Venetians could never achieve perfection in their art, for they did not have before them the Column of Trajan as did the artists of Rome. In a way Trajan's column marks one of the limits attained by ancient art. It rests upon a square pedestal on which military trophies are carved in delicate relief. Above the base, like a crown of laurel, the spiral series of reliefs wind like a tape or rotulus representing, one after another, the campaigns of the great Emperor (fig. 716). The two engravings on Plate LIII show us the minute detail with which these events are portrayed. It should not be forgotten that Apollodorus of Damascus, the architect and director of the work, had accompanied Trajan on his military

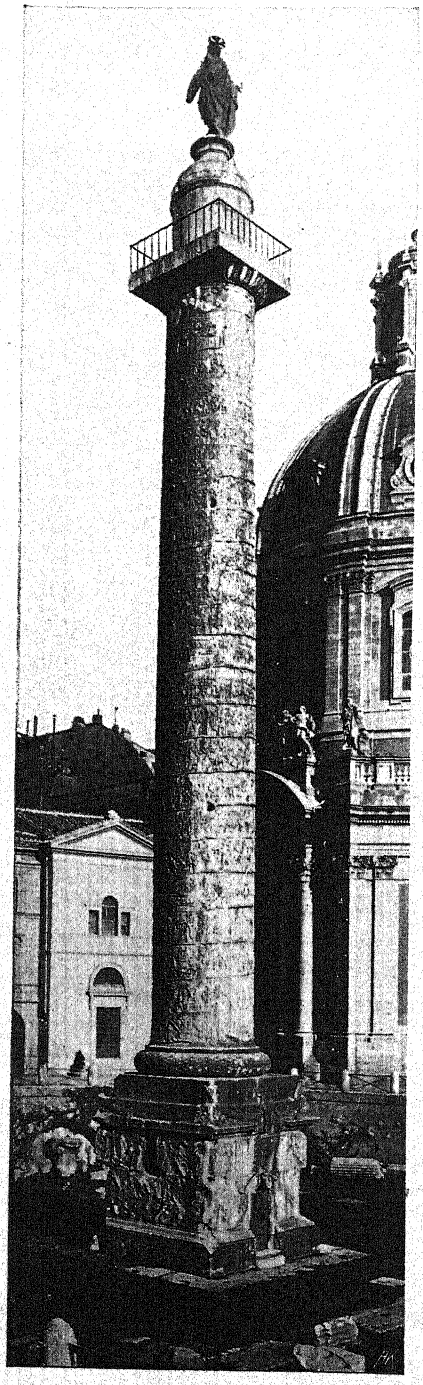


Fig. 716. — Trajan's Column.

expedition. We know that he supervised the construction of the famous bridge across the Danube, so it seems not unlikely that his rendering of the topography of the scenes of the various battles is accurate, and that many of the figures are actual portraits. The latter is certainly true of the figure of the Emperor himself which appears not less than seventy times in the twenty-three windings of the spiral frieze. Each scene is a continuation of the one preceding; there is no division marking off one episode or battle from another, but the figures are so skilfully grouped that, although the general action moves steadily on, the meaning of each scene is easily understood. This is the "continuous style" later adopted in Christian art. The colossal scroll covering this column is really nothing more than an illustrated chronicle of Trajan's campaigns. It is a book sculptured in marble. The scenes sometimes have a realism that is extraordinary and which brings to mind the sculptures of the Middle Ages. The fact is emphasized that we have here the conflict between Rome and the romantic spirit of the barbarian peoples of the north, which was later to inspire the artists of mediaeval Europe. Groups of barbarians in the German forest discuss with heart-sick gestures the course of events; their women take part in the struggle; and finally, when their king, Decebalus, the heart and soul of the resistance, dies in battle, the moon, the deity of the barbarians, appears through the clouds as in one of Ossian's poems. Peaceful scenes follow, and the barbarian chiefs pay reverence to the Emperor who treats the vanquished with his usual generosity. The picturesque camp and the scenes from military life are rendered in a most natural manner. But throughout this long frieze covering a

TRAJAN'S COLUMN

In the Lower zone the scene of the war is indicated by the huts of the Germans. In the second zone on the left, the Emperor, seated in state, holds a council of war with his generals. On the right, Trajan begins his campaign with the usual sacrifice.

In the third zone the soldiers cut trees to build a camp under the supervision of the Emperor. In the fourth zone we see the first battle with the barbarians.

TRAJAN'S COLUMN

In the lower zone the River Danube is seen covered with Roman boats. The river god raises his head above the surface of the water to watch the Roman army leaving its winter quarters and crossing the river on a bridge of boats.

In the second zone, on the left, Trajan addressed his troops from a tribune. On the right, the soldiers construct a camp. In the third zone, on the right, some more soldiers dig a trench, while a troop of cavalry cross a small bridge of timbers.

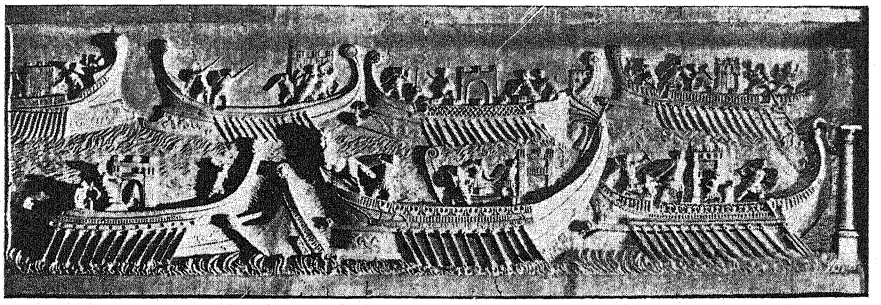


Fig. 717.— Naval battle. *(Medinaceli Collection.)* MADRID.

length of more than 650 feet, Trajan is ever present, the chief actor in every scene. He is on hand to give his aid in each difficulty that arises; he directs the march in person, he supervises each piece of engineering; and in battle he takes an active part like any soldier. These reliefs are the finest eulogy of a great ruler than can possibly be imagined. His campaigns can be followed step by step, and he is present in every crisis of the war, inspiring all with the courage and serene confidence of his august personality.

Besides these descriptive reliefs, this period, so famous for its successful wars and upright administration, witnessed the development of a taste for decorative sculptures of military and civic scenes. An example of this is the relief representing a naval battle which is now in the Medinaceli Collection (fig. 717). The frieze of the temple of Vespasian at Rome on which we see many objects connected with worship is also interesting. There are paterae, sacrificial axes,

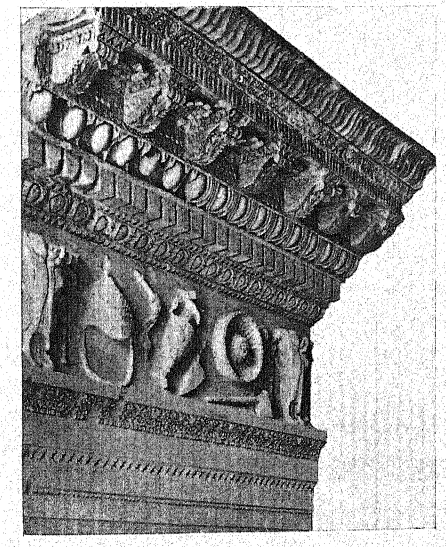


Fig. 718.—Frieze of the temple of Vespasian, *Capitol.* ROME.

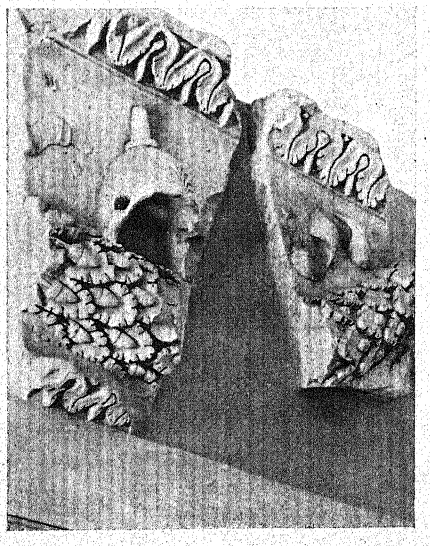


Fig. 719.—Fragment of the cornice of a temple of Trajan. TARRAGONA.

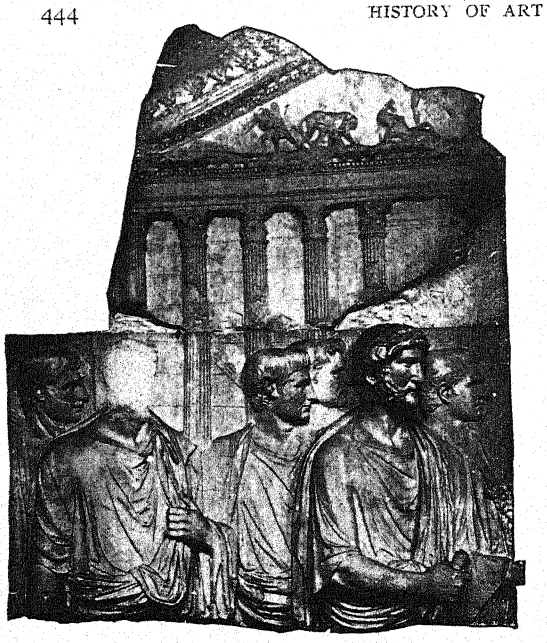
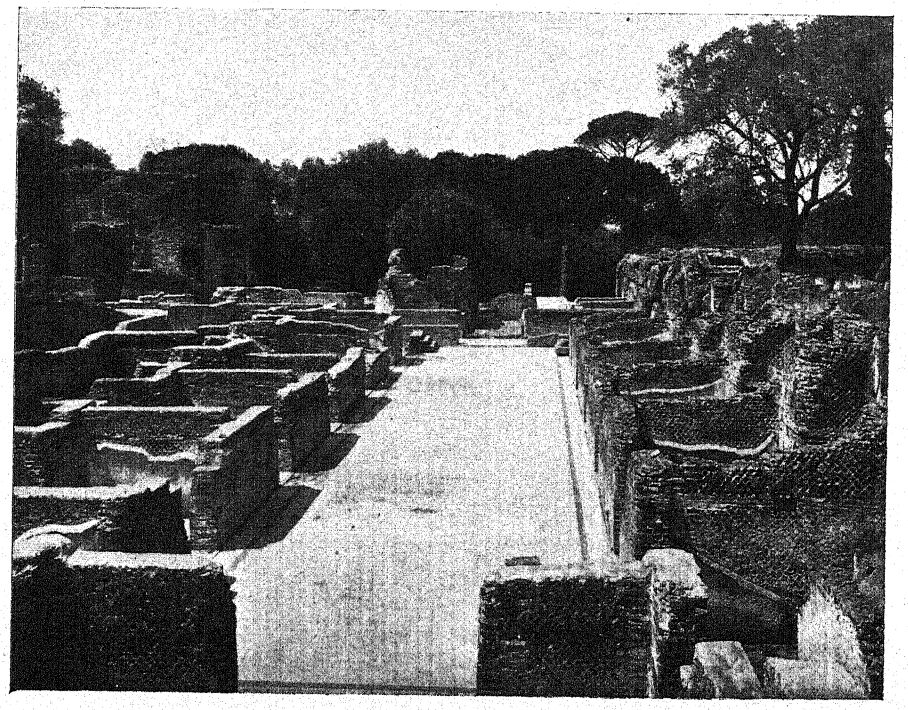


Fig. 720.—Relief of Hadrian taking part in the dedication of the temple of Venus and Roma.

vases and military helmets alternating with skulls of oxen (fig. 718). Another example of this style is found in one of the temples of Tarragona (fig. 719). Here are wreaths of oak-leaves carved in high relief with a realism that is not found in the garlands of the *Ara Pacis*.

Trajan was succeeded by another great Emperor who was also a Spaniard. This was Hadrian and he, too, was noted for his love of architecture. It is known that he drew up the plans and personally supervised the construction of the principal buildings erected during his reign. The relief reproduced in figure 720 shows him taking part in the ceremony of the dedication of the temple of Venus and Roma. The massive ruins of this double temple are still standing near the Arch of Titus. It was decastyle in form, that is, it was ten-columned. The front and rear porticos each opened into a *cella* at the end of which was an apse, and the two *cellae* lay back to back. The peculiar thing about these *cellae* was that they were roofed with a barrel-vault which was ornamented with coffers. These coffers are still to be seen in the roofs of the apses. The building did not lack grandeur, but it fell far short of the beauty of those built by professional architects like Apollodorus, the architect of Trajan's Forum. The story is told of the latter, that when he received the plans of this

Fig. 721.—Hadrian's Arch, Athens.



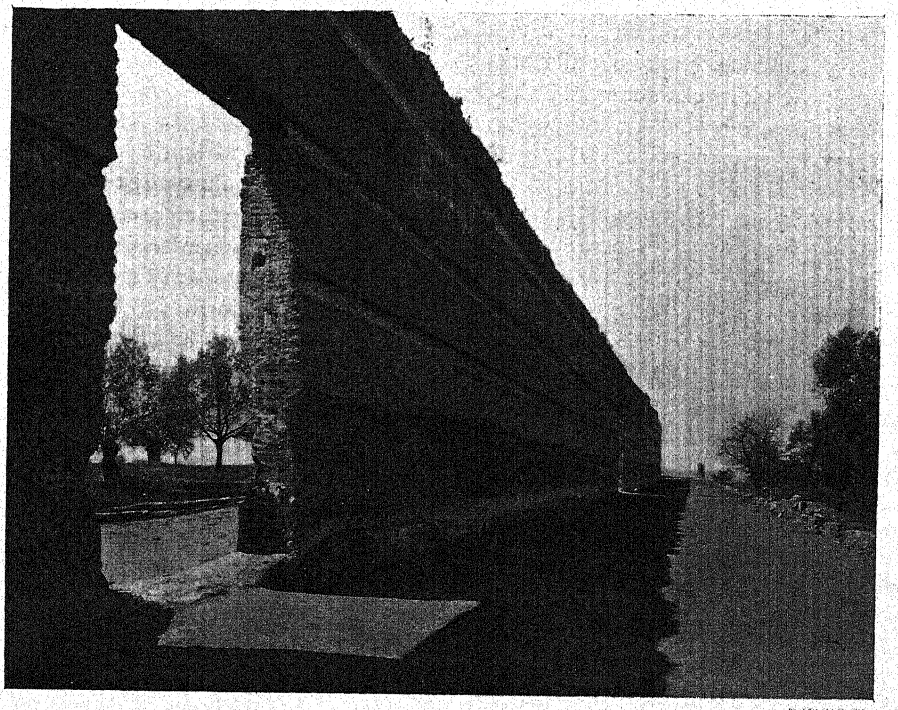


PHOTO ALINARI

Fig. 722. — Views of the Hadrian's Villa. *Tivoli.* ROME.

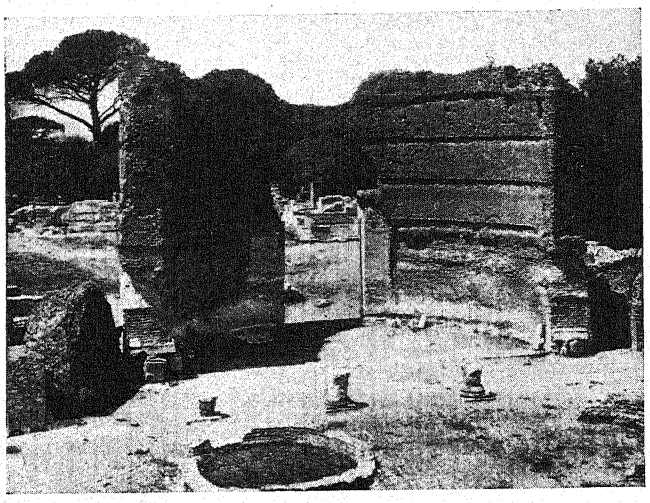


Fig. 723. — HADRIAN'S VILLA. Ruins of the Temple of Antinous.

temple together with a letter from Hadrian requesting his opinion, he made a few discrete criticisms which were not entirely flattering to the work of his Imperial pupil.

Many splendid monuments were also erected in Egypt and the Oriental provinces through the initiative of Hadrian. This emperor possessed what we might call a thoroughly modern spirit. He was fond of travel and his refined eclecticism led him to admire the ancient monuments that he saw in the provinces and to plan to imitate them at Rome. The trimumphal arch at Athens called Hadrian's Arch still stands as a testimony of his love for Greece. This was to be the principal entrance into a new city which the Emperor planned to build alongside of the old one which had by now fallen into decadence. Hadrian's aim was to construct a monument that should be purely Greek in character, and this is the case with the upper portion with its rectangular lines. But it seems very strange that in spite of the critical spirit of this Emperor, its lower part should consist of a semicircular arch that is altogether Roman.

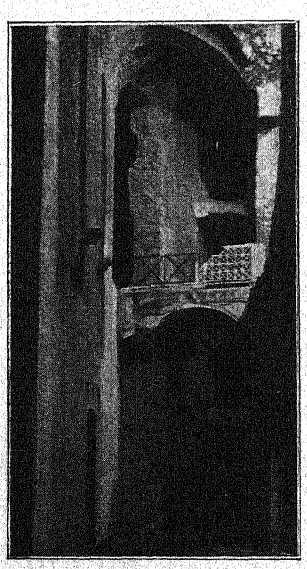


Fig. 724. — Vaults on the Palatine.

Very different is his famous villa outside of Rome which displays a love for the exotic emphasized by its imitations of Egyptian and

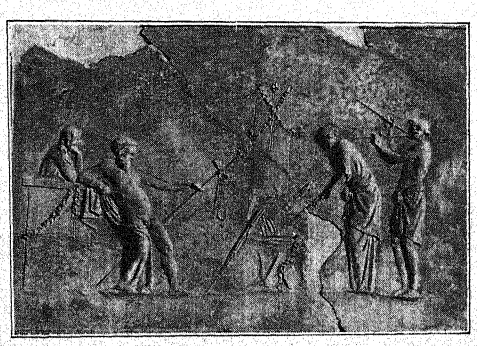


Fig. 725. — Vault decoration in stucco.

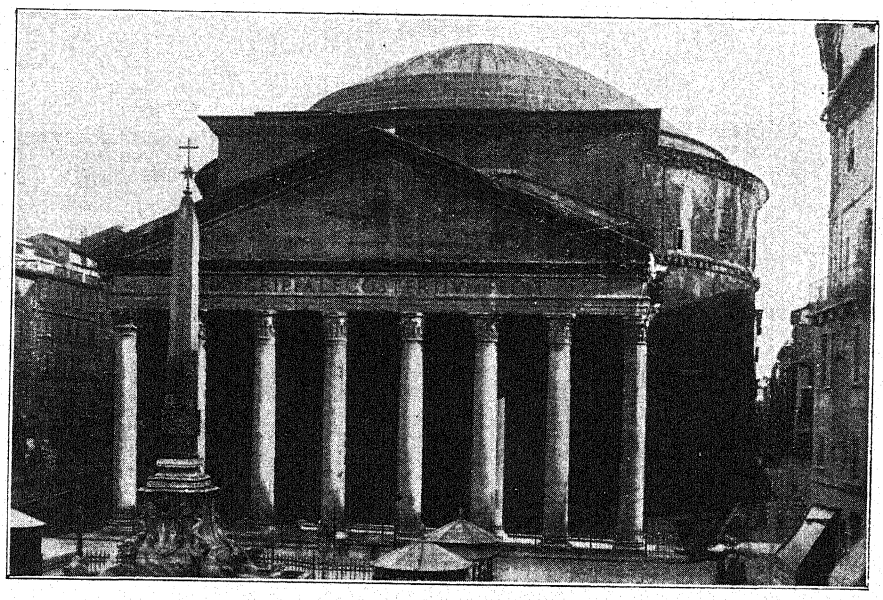


Fig. 726. — Façade of the Pantheon as it appears today. ROME.

Oriental temples. Hadrian's Villa is half destroyed, but its ruins still give us an idea of what this gigantic structure was. The vaults, now stripped of their stucco covering, still cover vast areas of floor space (figs. 722 and 723). The Imperial residence contained a theatre, large libraries, baths, quarters for the accommodation of guests, and temples dedicated to the gods of Italy and the Orient. It was filled with statues and works of art of every sort. These vast ruins are the source of a great many of the antique sculptures in the museums of Rome and all Europe, and the builders of the Renaissance found it an inexhaustible quarry of precious marbles. Hadrian, who reaped the benefit of his foster-father's conquests, no doubt assembled in this palace the originals, or at least faithful copies, of many of the old masterpieces of Greek art.

This Emperor also carried out an extensive program of reconstruction on the Palatine. The great vaulted substructures, which were long believed to be part of the palace of Tiberius because of the stamps on the bricks of which they are composed, should be ascribed to Hadrian's period (fig. 724). The architectural technique of these brick vaults covered with stucco played an important part in the development of the fine decorations in this material, for the surfaces of these vaults were covered with figures and ornamental designs modeled in relief (fig. 725). These reliefs were not always painted, but were often set in panels framed by the mouldings, in which graceful small figures modeled by the Roman stucco-workers stood out from their background.

The largest vaults were ornamented with coffers as in the dome of the building now called the Pantheon which is entirely the work of Hadrian's reign (figs. 726 and 727). This building was erected on the site formerly occupied by the baths of Agrippa, the foundations of which are still to be seen extending to

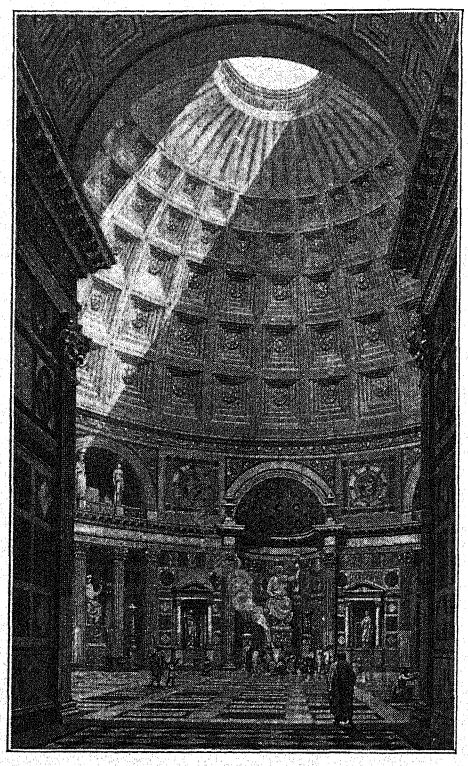


Fig. 727. — Restored interior of the Pantheon.

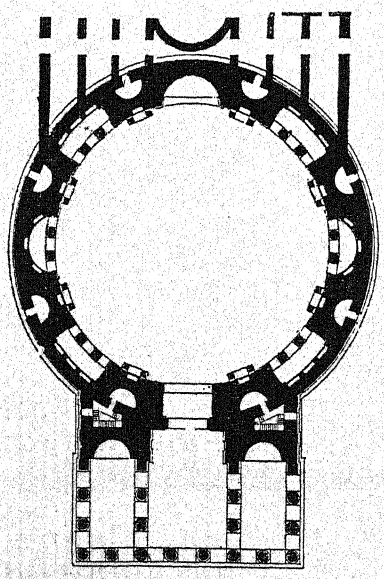
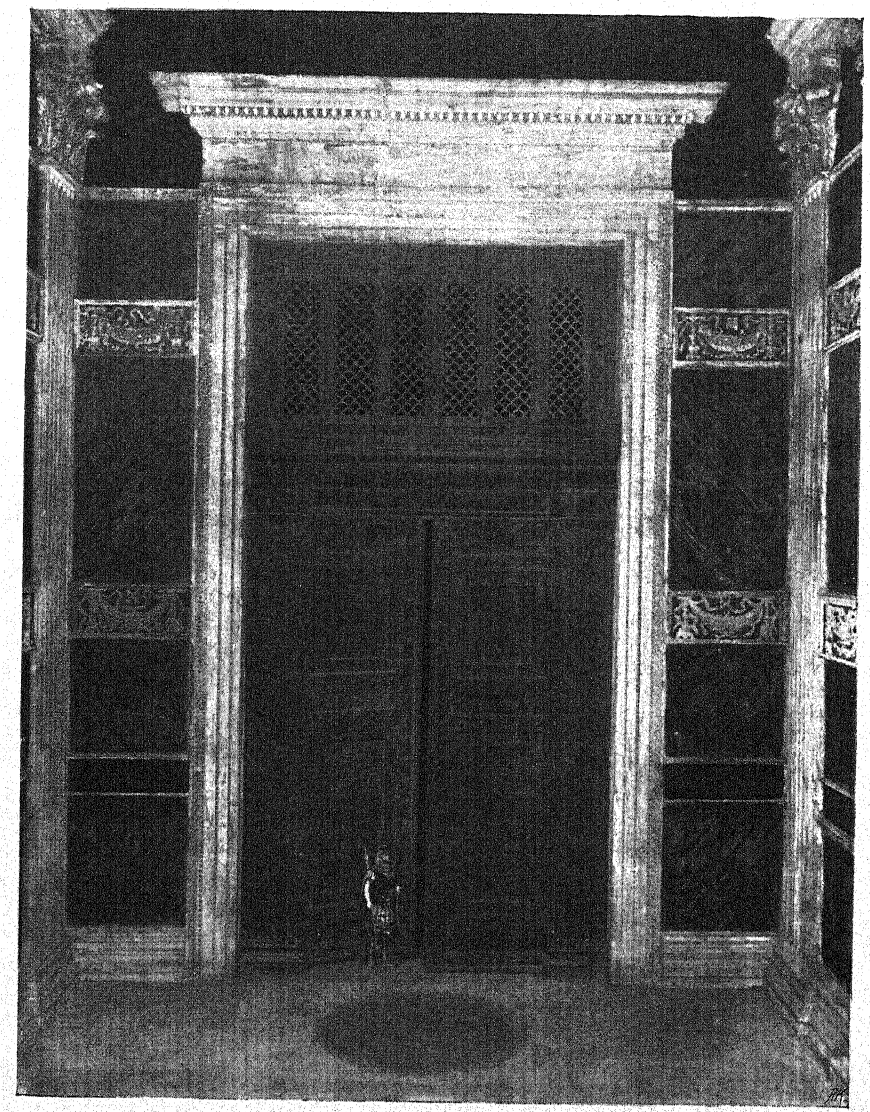


Fig. 728. — Plan of the Pantheon.

the rear (fig. 728). Also a portion of the portico with its sturdy porphyry columns seems to have belonged to the baths of Agrippa. For this reason Hadrian inscribed the name of the great Augustan statesman on the frieze of the façade. But the interior of the circular structure and the great dome, 136 feet in diameter, date from Hadrian's period. This hemispherical dome surmounting the rotunda has a circular opening in the centre which admits the light. The vault is of concrete strengthened by brick arches. The cupola of the Pantheon was one of the models followed by the architects of the Renaissance. Brunelleschi, the architect of the first dome built since ancient times (in Florence), was said to have derived his principles from this building, and Raphael, the great painter and architect, made some delightful sketches of it which are still preserved (fig. 729). The Pantheon has come down to us almost intact. Its pavement is that of the ancient building. Only the niches have been modified somewhat in the course of its transformation into a church in order to convert them into chapels. Its ancient bronze door has also been preserved. It is probable that the reliefs of the latter were originally gilded and painted in various colors. (Plate LIV.)

In the interior of the Pantheon we see that some of the lines of Greek architecture were preserved in the Corinthian pilasters and the friezes, but these features were combined with the vaulted construction so characteristic of Roman architecture. We observe a like survival of the Greek orders in the great religious buildings of the period following. This is the case in the temple of Antoninus and Faustina in the Roman Forum (fig. 730), the vaulted temple of the



Door of the Pantheon (restored). ROME.

Sun on the Quirinal (fig. 731) with its simple plan and rich friezes, and finally in the magnificent temple of Neptune at Rome, now occupied by the Borsa, which may also date from the time of Hadrian (fig. 732). The tall columns of the temple of Neptune rest upon a base or *podium* which is ornamented with military trophies alternating with female figures representing the different provinces of the Empire. Personifications of this sort are original with Roman art, although some of these figures are copied from the grave-reliefs of Athens and have their hands folded in the same melancholy and subdued manner. Others are more civic in character and their attributes form a proud display of the natural resources of the provinces represented, especially the tribute they bring to the Eternal City. Some are simply dressed in a mantle and bring ears of grain or other products of their country. Others, like Hispania, appear in armour as though ready to fight the barbarians at the side of Mother Rome, although they themselves had once resisted her domination (fig. 733).

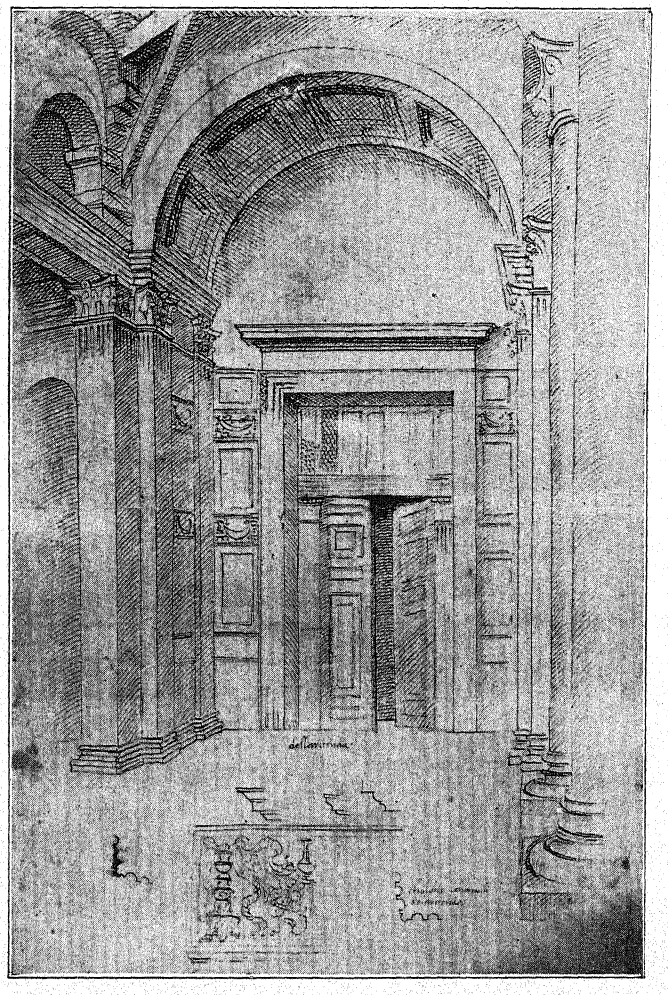


Fig. 729. — Doorway of the Pantheon in the sixteenth century. Sketch by Raphael.

Coming to the tombs of this period, we have already seen that Trajan was interred in his own Forum, but the type of Imperial mausoleum inaugurated by Augustus was still popular. This was a great circular structure with an interior chamber which contained the sarcophagus. The gigantic remains of Hadrian's tomb are still preserved, transformed by the Popes into the Castle of Sant' An-

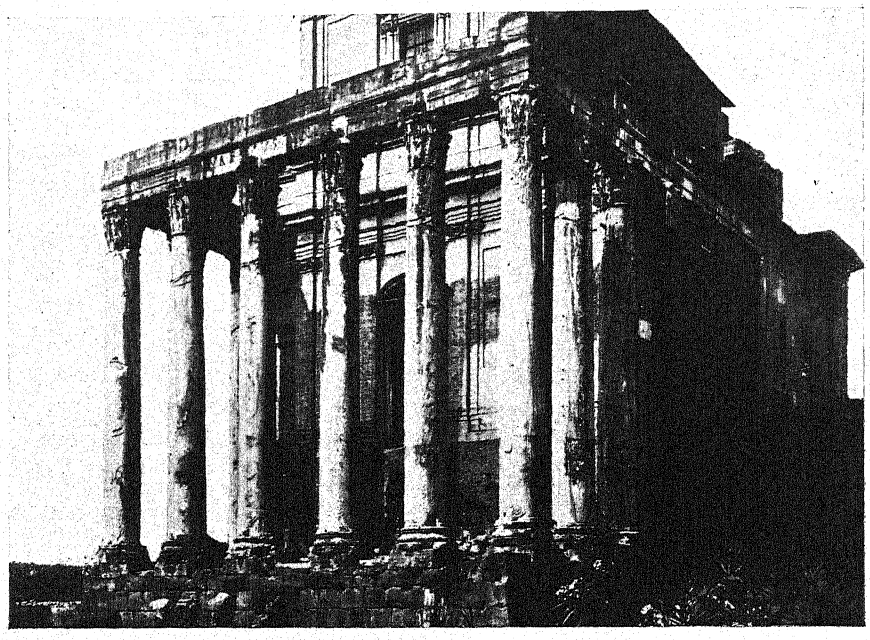


Fig. 730. — Temple of Antoninus and Faustina. *(Roman Forum.)*

gelo, and its enormous mass still dominates half of Rome from the right bank of the Tiber. The tomb of Hadrian was approached by a bridge ornamented with statues (fig. 734). The mighty tower was surrounded by a façade of two stories faced with columns and was crowned by a conical roof surmounted by the great bronze pineapple now in the Vatican. The entire tower lay within a square enclosure consisting of a colonnaded court.

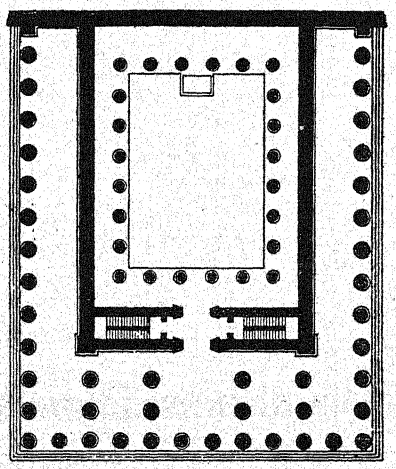


Fig. 731. — Plan of the temple of the Sun. Rome.

More modest, but still retaining the form of a square or round tower, are many of the tombs along the Appian Way. Just outside the city the land along the Roman highways served as cemeteries; indeed, along the Appian Way the sepulchres were so numerous that they lay side by side and formed a great avenue of tombs for miles (fig. 735). This highway is famous for its tombs. Stripped of their marble covering, the masses of masonry of which they are composed are so abundant that they still give the landscape a picturesque sky-line. Although the land bordering the Appian Way was the fashionable cemetery preferred by

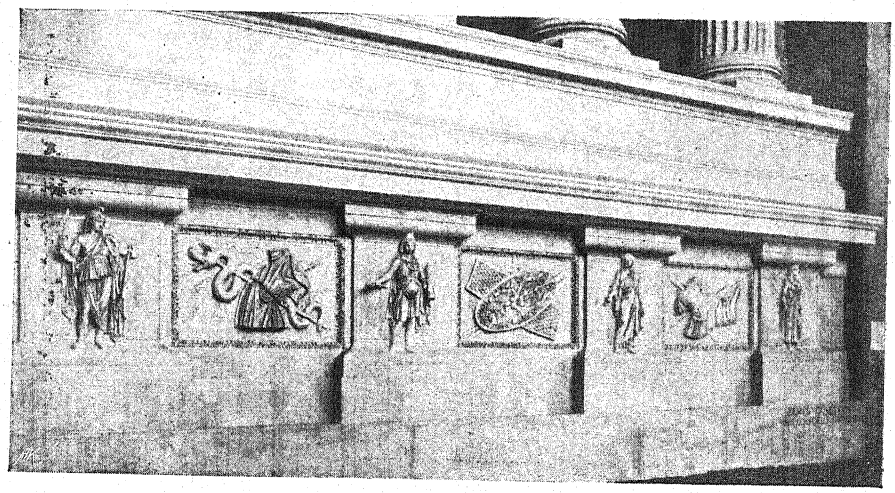


Fig. 732. — Base of the temple of Neptune. ROME.

the Roman patricians of this period, as this road led to Campania and Southern Italy, nevertheless there are many tombs along the other roads outside Rome like the Via Latina, the Via Tusculana and the Via Ardeatina.

We now come to the sculpture of this period. We have already anticipated the discussion of this subject in our study of the ornamentation of some of the monuments like the Arch of Titus and Trajan's column. An interesting relief commemorating one of the historical events of Hadrian's reign is reproduced in figure 720. This represents the dedication of the temple of Venus and offers the same ingenious treatment of figures in two planes giving the same illusion of perspective as that seen in the reliefs of the Arch of Titus. Another important monument erected a few years later has also been preserved. This is the triumphal column dedicated to Marcus Aurelius. Here the scroll-like reliefs representing the campaigns of the Emperor-Philosopher have not the artistic vigor of those of Trajan's Column. Carved on one of the faces of its base is a remarkable relief representing the apotheosis of Antoninus and Faustina, whose adopted son he was. A winged genius bears them aloft accompanied by a flying eagle on either side (fig. 736). Two allegorical figures witness the scene, Rome seated upon a heap of military trophies, and the *genius loci* of the Campus Martius where their bodies were burned. The latter reclines upon the ground and rests a hand upon the great obelisk of Augustus which stood near by. The theme is the same as that of the cameo representing the apotheosis of Germanicus, but its treatment is colder and its character is more official and mythological. Instead of the lifelike por-

Fig. 733. — The Province of Hispania.

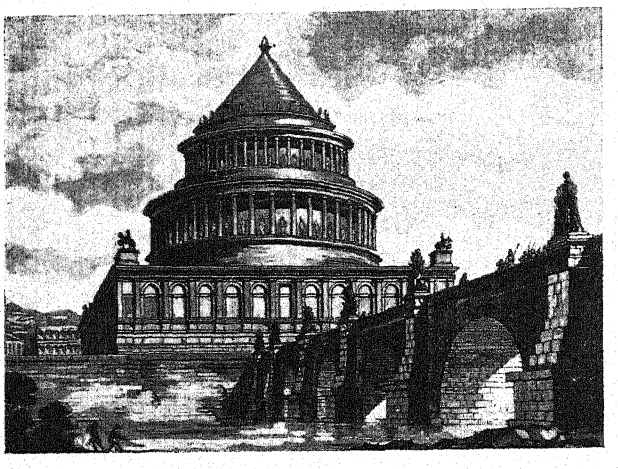


Fig. 734. — Restoration of Hadrian's tomb. ROME.

traits of the members of the Imperial family, we see only these two formal and idealized figures.

In the relief on the base of the Column of Marcus Aurelius the subject is portrayed with a clarity that is perhaps excessive, and the picturesque background of the earlier reliefs is lacking. The same is true of the commemorative sculptures now in the Museum of the Capitol which were formerly the ornamental panels of the Arch of Marcus Aurelius at Rome. The scenes of sacrificial ceremonies and triumphal processions are executed with a certain magnificence, but they suffer from the monotony of the official art of the Empire, which began to deteriorate in the middle of the second century. Nevertheless, some very handsome reliefs were discovered at Ephesus in 1903 near the ruins of the great library. These appear to belong to a monument erected in commemoration of the expedition of Marcus Aurelius against the Parthians (fig. 737). The art of these official reliefs found in Asia is much more vigorous than that of the Roman sculptures of the same period, and the memory of Hellenistic traditions is still to be seen in the details of some of these monuments in Asia. The Emperor mounts his triumphal chariot; Victory is at the reins and Rome leads the horses. Behind the latter is the Sun crowned with rays, while Mother Earth with her horn of plenty reclines upon the ground. The composition is not lacking in both action and grandeur. We see in it a spark of the art of the sculptors who carved the frieze of the altar at Pergamum, which the passage of four centuries had not yet extinguished in these Asiatic cities.

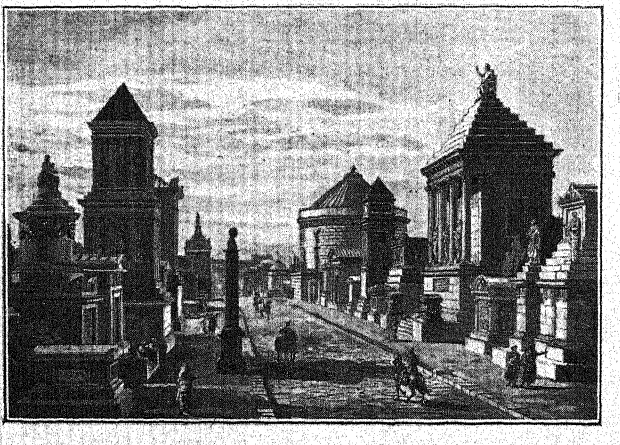


Fig. 735. — The Appian Way outside Rome. Restoration.

Although the commemorative reliefs at

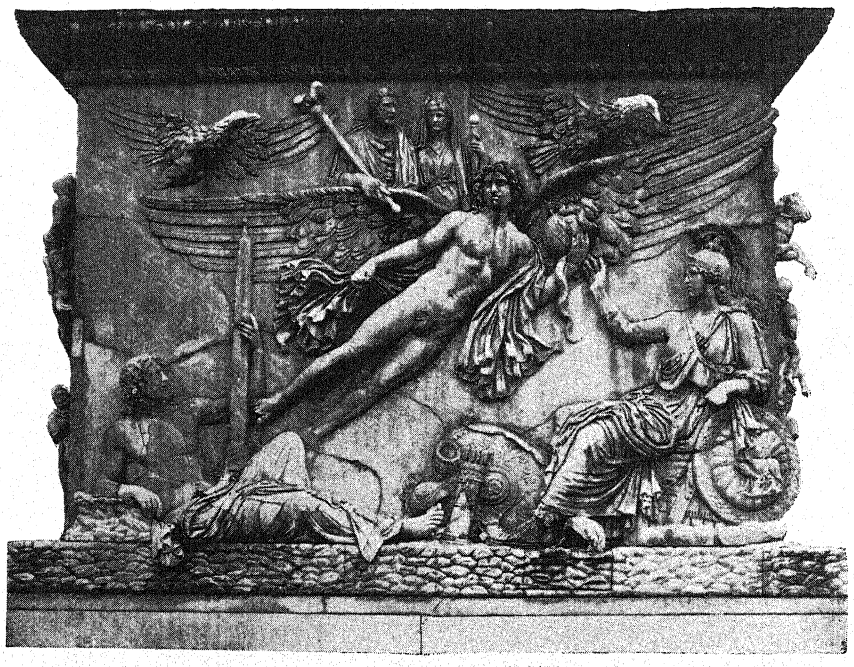


Fig. 736. — Base of the Column of Marcus Aurelius. *(Pigna Garden.)* ROME.

Rome begin to show a certain decadence, the portrait sculptors still continue to produce astonishingly good work all through the second century A.D. We

Fig. 737. — Relief representing the triumph of Marcus Aurelius, discovered at Ephesus. *(Museum of Vienna.)*

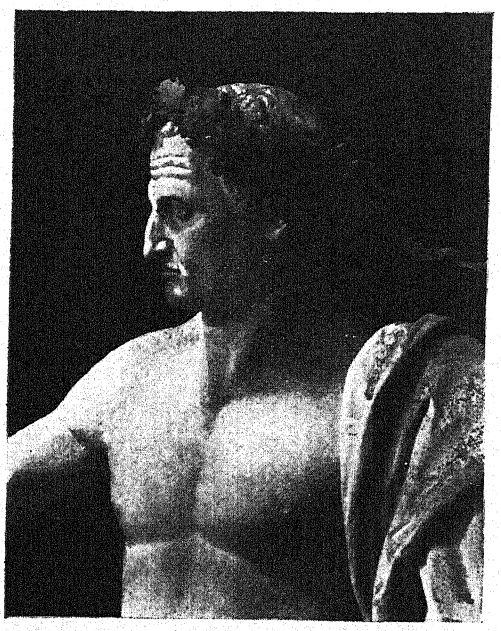


Fig. 738. — Portrait statue of Nerva. *Vatican.*

Fig. 739. — Equestrian statue of Marcus Aurelius. ROME.

have already noted the realistic head of Vespasian reproduced in figure 705, with the rather fleshy face characteristic of the Flavians. These Emperors are usually represented wearing the toga, for their figures were hardly suited to the Imperial armour of the slender "Augustus from Prima Porta." An excellent statue of Nerva is preserved in the Vatican (fig. 738). Here we see the type of the seated emperor with a mantle draped over the left shoulder and hanging down over the legs. This statue resembles that of Tiberius which was discussed in the previous chapter and is one of the finest works of the sculptors of this period. The rather vulgar face with its wrinkled forehead gains nobility from the majestic attitude of the entire figure. More portraits of Trajan and Hadrian have come down to us than of any other emperor except Augustus. The Roman State was at the height of its power; the provinces overflowing with plenty, thanks to an able and paternal administration, called for statues of the Emperor. The great statue of Marcus Aurelius at Rome was the only equestrian statue of an emperor known to the sculptors of the Renaissance, and for this reason all our modern equestrian statues preserve this type (fig. 739).

Cities and provinces even built temples in honor of the deified Emperor in their adulation, and statues of the Empress and other members of the Imperial family were in great demand in every part of the Empire. Portraits of the Empresses have been identified, such as Plotina, the wife of Trajan, Sabina, the wife of Hadrian, and the two Faustinas, wives of Antoninus Pius and Marcus Aurelius.

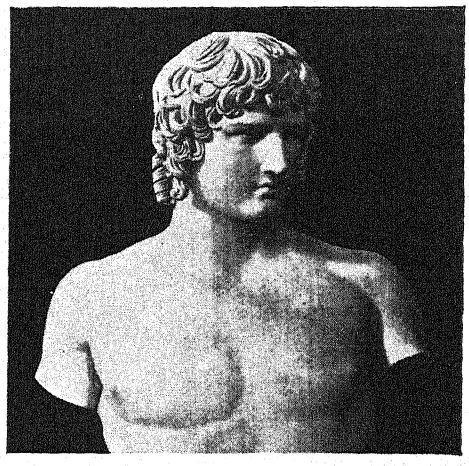


Fig. 740. — Bust of Antinous. *(Vatican.)*

The most famous of the portraits of persons of secondary importance is that of Antinous, the young Bithynian favorite of Hadrian. This Oriental youth, so noted for his beauty, mysteriously drowned himself in the Nile. Some obscure Asiatic superstition led him to believe that such a sacrifice would perpetuate the good fortune of the Emperor. Hadrian never forgot his unfortunate favorite. He elevated him to the rank of a demigod and commanded a city to be built in his honor in Egypt. In carving his portrait statue the sculptors of the Emperor idealized it and created a new artistic type, the last in classic art. Upon the broad shoulders of an Apollo, they set the head of Antinous with its sensuous face and curly bacchic locks, the whole constituting a most original combination of manly vigor and effeminate sensuality (fig. 740). We see Antinous represented in many different fashions, but always preserving the same type. Wearing the mantle of a priest he stands or sits, sometimes in the attitude of a god, and sometimes bearing a wreath in the informal posture seen in the marvelous relief in the garden of the Villa Albani (fig. 741).

Fig. 741. — Antinous. *(Villa Albani.)* ROME.

Fig. 742. — Tusnelda, the barbarian prisoner. *(Loggia dei Lanzi.)* FLORENCE.

Fig. 743. — Portrait statue of a Vestal. *(Museum delle Terme.)* ROME.

Another idealized type often copied during the reigns of the Antonines is that of the barbarian prisoner. This may have been the result of Trajan's wars in which contact with the Germanic tribes stimulated the imagination of the Roman sculptors to the production of this allegorical representation of the conquered peoples. This was the Barbarian with hands bound or folded, dressed in a belted tunic and trousers with a cap on his head to indicate that he dwelt in the cold regions of the north. The stereotyped face is that of a man with a flat nose, long hair and a small beard hanging down over the breast. A female parallel to the masculine type of barbarian prisoner was also created. This was a Germanic woman with long hair. Her head is bowed in an attitude of submission, but in her face is revealed the intense grief of the captive (fig. 742). These types of Antinous and the German barbarian

were the last classic types to be created, but portrait sculpture continued to be marvelously good. The portraits of the patricians and of the humbler middle class were, possibly, better than the idealized likenesses of the emperors. The latter were, no doubt, turned out by the dozen from the same model and the models themselves did not improve as time went on. It is interesting to note that we are able to fix the period, often almost the year, in which a statue was carved from such details as the manner of wearing the hair, for the style of the garment or coiffure of the statue was usually in imitation of that of the Emperor and his family. We have already seen this to be true in the time of Augustus and the Claudian Emperors. We know that the admirable portrait statue ot the head-vestal (fig. 743) found in the Roman Forum must date from the reign of Trajan, because her coiffure is the same as that worn by Plotina. A little later the hair was arranged so as to form a high crown or pompadour above the forehead. The most interesting of these portraits with the hair combed up above the forehead like that of Julia, the daughter of Titus, is the one in the Museum of the Capitol reproduced in figure 745.

Fig. 744. — Julia, the daughter of Titus. *(Vatican.)*

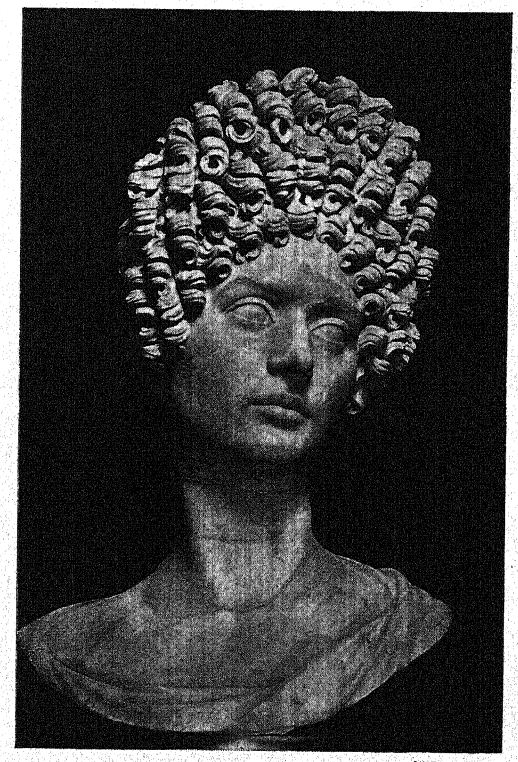


PHOTO ANDERSON

Fig. 745. — Portrait of a Roman lady with her hair in the style fashionable during the reign of the Flavians. *(Capitol.)*

Fig. 746. – Spanish-Roman lady with hair dressed in the style prevalent under the Antonines. *(Museum of Madrid.)*

Later the fashion changed completely and in the time of Antoninus Pius and Marcus Aurelius, the hair was parted and waved in the manner of that of the two Faustinas (fig. 746). This style probably began in the reign of Trajan, for in the friezes of Trajan's Arch at Benevento we see Victories in pairs bearing garlands, one still wearing the high coiffure and the other with her hair parted and waved. There is a group of mother and daughter in the Chatsworth collection in England also that is both beautiful and unusual. The mother still wears her hair curled in a high coiffure, while the daughter has adopted the newer fashion of parting and waving her hair. (Plate LV.) Then there is the charming funeral group on the Vatican in which we see the figures of husband and wife set upon their tomb (fig. 747). The wife's hair is smoothly parted, a presage of the simplicity of the Christian period. We are touched by the affection seen in this group. The wife holds her husband's hand, unwilling in death to be sepa-

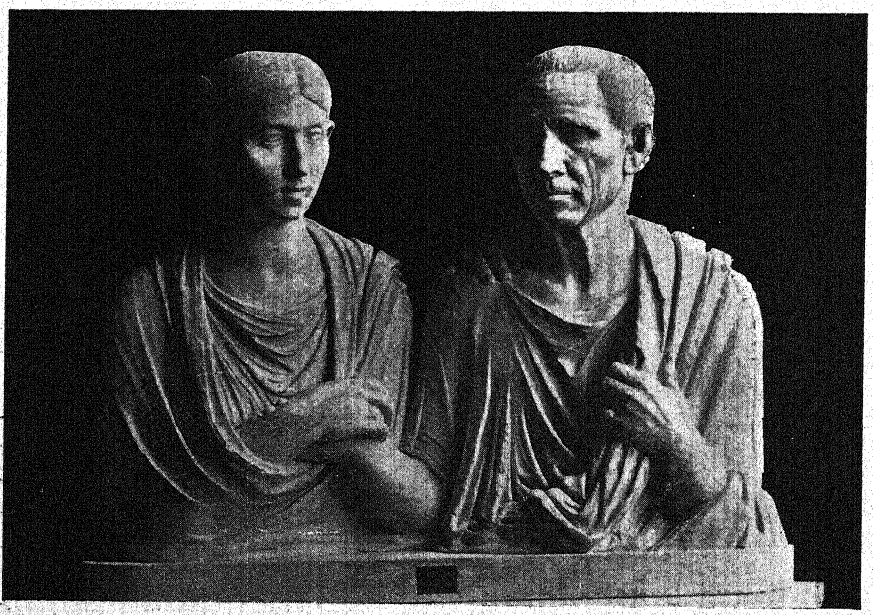
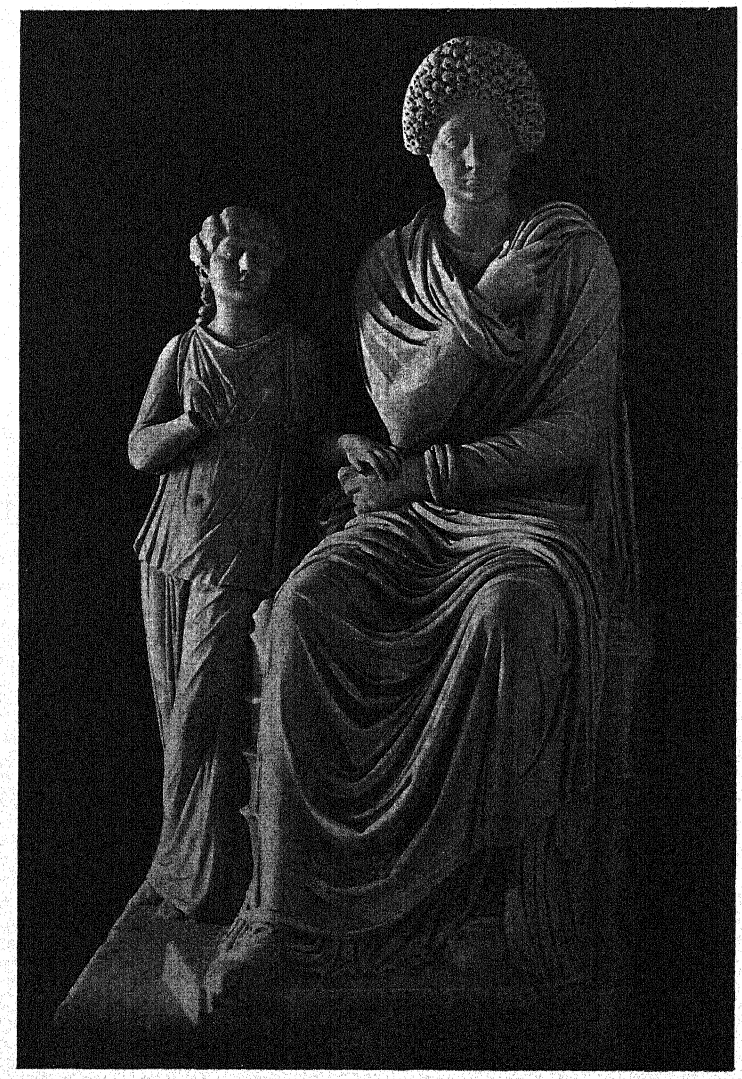


Fig. 747. – Funeral group of husband and wife. *(Vatican.)*



Portrait group of mother and daughter. *(Chatsworth Collection.)* ENGLAND.

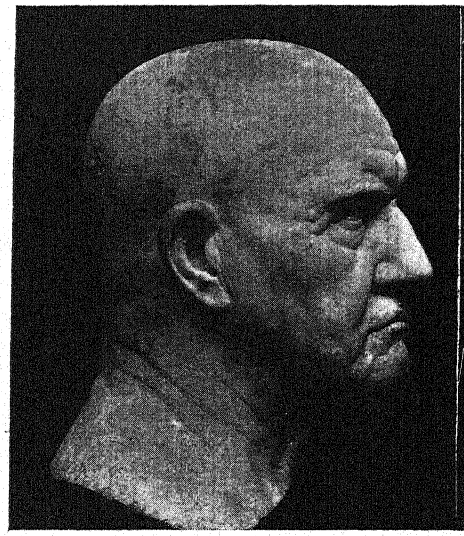


Fig. 748. — Head of an old man. *(Museum of New York.)*

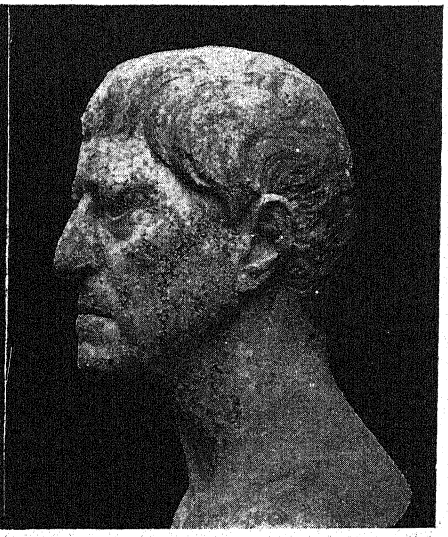


Fig. 749. — Head of a man. *(Museum of New York.)*

rated from her life companion. The sentiment is that expressed in the Greek grave-stelae, but it possesses a new dignity that is Roman.

There are many portraits of unidentified persons carved by sculptors themselves unknown, both in Rome and in the provinces. These are both beautiful and realistic, and date from the beginning of the second century to its end.

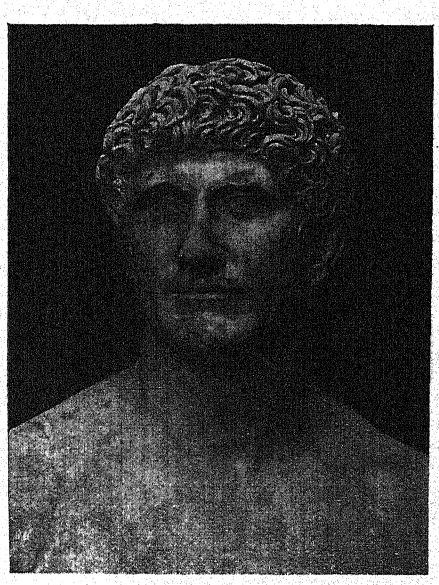


Fig. 750. — Portrait of a Roman of Trajan's time. *(Vatican.)*

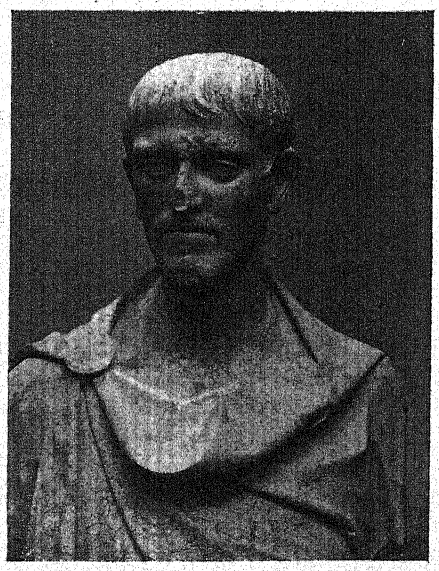


Fig. 751. — A Roman of the time of Hadrian. *(Museum of New York.)*

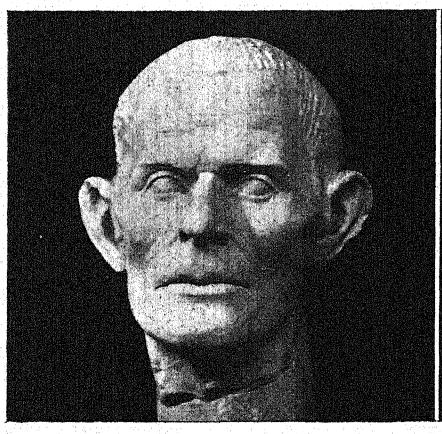


Fig. 752. – A Venetian. *(Museum of Aquileia.)*

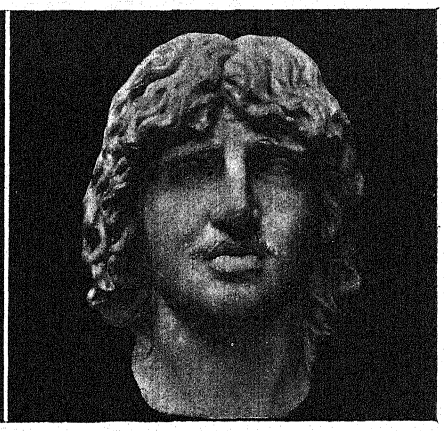


Fig. 753. — A German. *(British Museum.)*

Two portrait heads recently acquired by the Museum at New York have an unstudied naturalness that is marvelous (figs. 748 and 749). The portrait bust of a Roman citizen in the Vatican was at first supposed to have been carved during the last years of the Republic because of its realism, but the arrangement of the hair and the smooth face show it to be the work of the time of Trajan. Another indication of this period is the shape of the bust itself and the manner in which the front of the breast is cut off. In the busts of the reign of Augustus the head is accompanied only by the neck and the upper portion of the breast, but as time went on more and more of the breast was added, until finally we see a considerable portion of the torso. The manner of carving the eyes is also characteristic of Hadrian's time. Not only is the pupil outlined, but there is a small cavity in the centre which makes a shadow as in figure 751. This was done not only at the capital, but also in all the provincial centres. In the latter we find excellent portraits of local persons of note which date from this period, and which were undoubtedly carved by provincial sculptors.

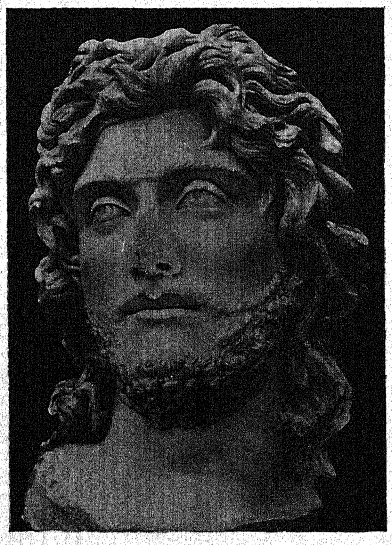


Fig. 754.— A Greek. *(Museum of Athens.)*

The portrait of a Spanish lady is reproduced in figure 746, but a large gallery could be filled with provincial portraits of the second century which have come down to us, and each is typical of the locality in which it was found. The feeling of Roman sculptors for realism caused them to render not only the *ethnos,* or race spirit, something which the Greeks had already done, but also the individual character of the person represented. Note

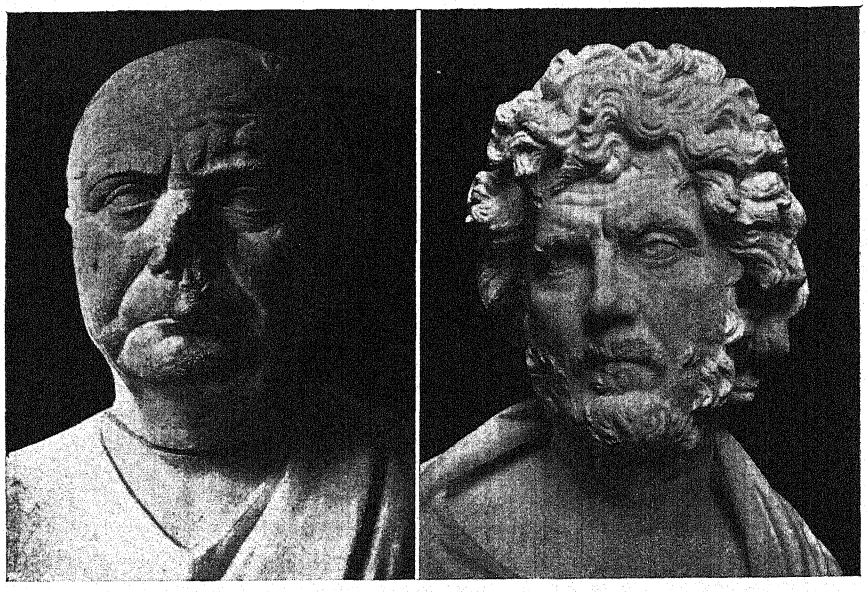


Fig. 755. — A Spaniard. *(Museum of Madrid.)* Fig. 756. — A Dacian. *(Museum of Vienna.)*

the ears standing out from the head of the feeble old man in the Museum of Aquileia (fig. 749). These portraits from the Roman provinces are amazingly lifelike and present the personalities of the sitters more than do those of the Emperors, which are always somewhat idealized. The audacity with which the Roman sculptors analyzed the faces of their sitters, when these were private citizens, can only be compared with the works of the Dutch and Spanish painters of the sixteenth century. The head of the German in figure 753, it is true, is a rather impersonal rendering of the barbarian type, but the Greek in figure 754 is a very real person, one of the Athenians of Greece in its decadence, of whom the writer of the Acts of the Apostles said, they "spent their time in nothing else but to tell or hear some new thing." The portrait of the wrinkled old man

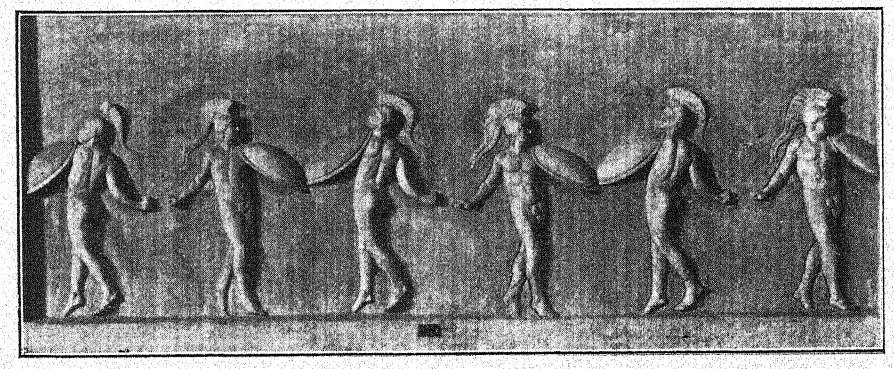


Fig. 757. — Dance of the warriors. *(Museum of the Vatican.)*

Fig. 758.—Relief of roses.
(Lateran Museum.)

found at Cordova and now in the Museum at Madrid is that of an Andalusian land-owner of today (fig. 755). The portrait of the Dacian also is not merely the representation of a member of a strange and foreign race, but is evidently a faithful likeness of the sitter (figure 756).

We shall now continue our study of styles of decoration, especially on the monuments, an art of which the Romans were masters. It has already been noted that in the lower portion of the *Ara Pacis* the acanthus pattern was developed into many charming leafy forms carved in relief upon a plain background. The disappearance of this background, which was later filled completely with ornamental reliefs, is a purely Roman development and is one of the most characteristic features of the evolution of Roman decorative art. Nevertheless, as in the styles of mural decoration, the sequence of sculptural ornamentation is not always strictly chronological. In the delightful relief of the dance of the warriors in the Vatican (fig. 757) the theme itself appears to date from Trajan's time, and yet the principal source of its charm is the effect of the dark shadows cast upon the plain light background. The eagle in the church of the Holy Apostles (fig. 1) also stands out against a large background, its great crest and body casting a heavy shadow upon the smooth rectangular surface behind it. But, little by little, delicate leaves carved in low relief spread over this plain field and other elements in higher relief cast their darker shadows, as in the exquisite pillar covered with roses which dates from the time of Hadrian (fig. 758). This is really the illusionism of the historical reliefs applied to decoration. The effect of perspective produced by a combination of high and low relief is the same as that seen in the compositions on the Arch of Titus.

Later the decoration of the background becomes relatively more important and the smooth surface disappears more and more. The contrast of lights and shadows spreads over the entire surface as in the handsome relief from Trajan's Forum with a large decorative vase in the centre and two genii pouring water from pitchers on the sides (fig. 759). The same is true of the friezes on the

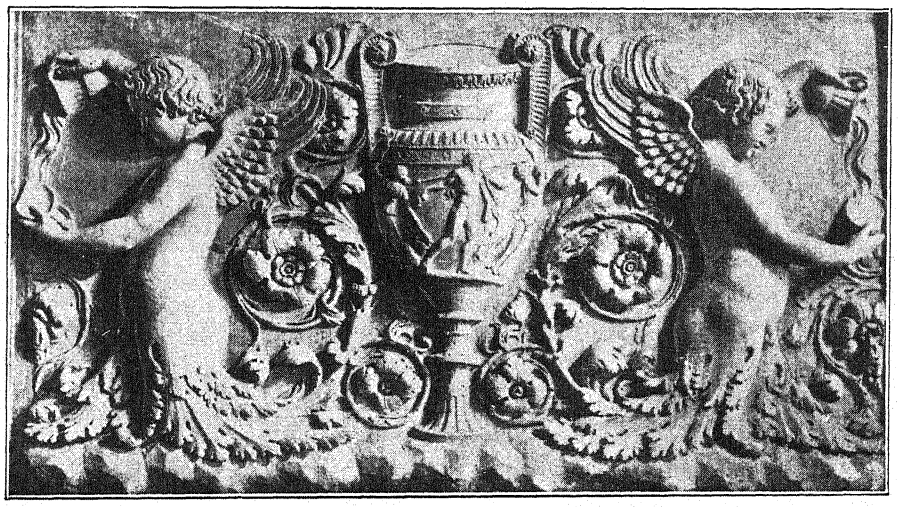


Fig. 759. — Relief from Trajan's Forum. *(Lateran Museum.)* ROME.

temple of the Sun on the Quirinal which date from Hadrian's time. Here the tendency is still more pronounced; the acanthus leaves become larger and thicker and finally fill the background completely as in the frieze in figure 760. The general appearance of the relief is no longer that of a light plane, but it becomes a raised surface on which the contrast of light and shade is almost lost. This compels the use of a new decorative scheme with deep incisions which give the leaves a dark outline as in the frieze representing a vine in the Lateran Museum. This tablet probably dates from the end of the sacond century (figure 761). The effect of leaves standing out from a luminous white background produced by the Augustan reliefs, is now attained by means of dark shadows which mark their outline, and the leaves themselves almost cover the entire surface. This was the treatment adopted by Christian and Byzantine decorative art, especially in the Orient. There, the intense light cast such dark shadows that it was necessary to show very little background in order not to allow the shadow of one relief to spoil the outline of another. The most successful example of this method of treatment is the remarkable frieze of the Mesopotamian castle

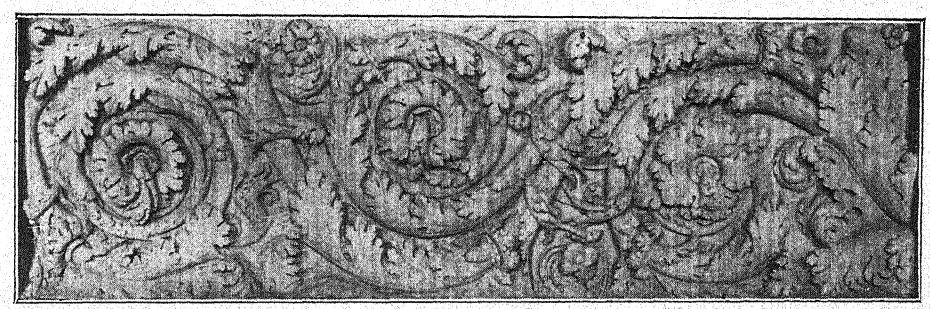


Fig. 760. — Relief from the principles of second century A.D. *(Lateran Museum.)*

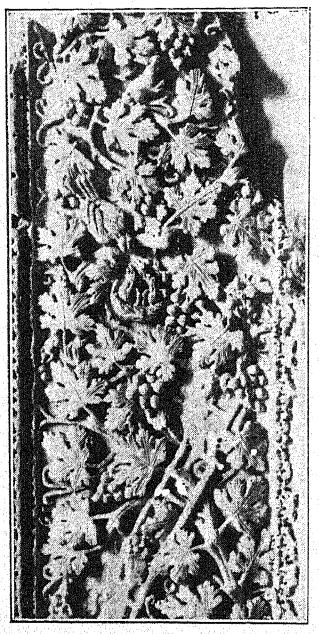


Fig. 761.— Grape-vine frieze. *(Lateran Museum.)*

of M'schatta; the whole frieze has recently been transported to the Museum of Berlin (fig. 762).

The first thorough analysis of the different styles of Roman decorative reliefs was the remarkable work A. Riegl called *Die spätrömische Kunstindustrie*. Here, for the first time, we find a study of the progress and evolution of a phase of art which had previously been considered merely decadent. We see that what Roman art lost in naturalness, it gained, first in impressionism, and later in richness and decorative effect. Such radical changes both in taste and technique have been explained as the consequence of the introduction of Oriental ideas into Rome. Today, however, it is ascribed with better grounds to evolution along parallel lines, both in Roman art and in the Hellenistic art of the Orient. In any case the fact should be recognised that the grape-vine frieze in the Lateran (fig. 761), in which the principle of a dark background behind the plane of the decoration has been skilfully applied, is purely Roman in design and antedates everything of this sort that has been done in the Orient. It preceded by three centuries at least the M'schatta frieze which may

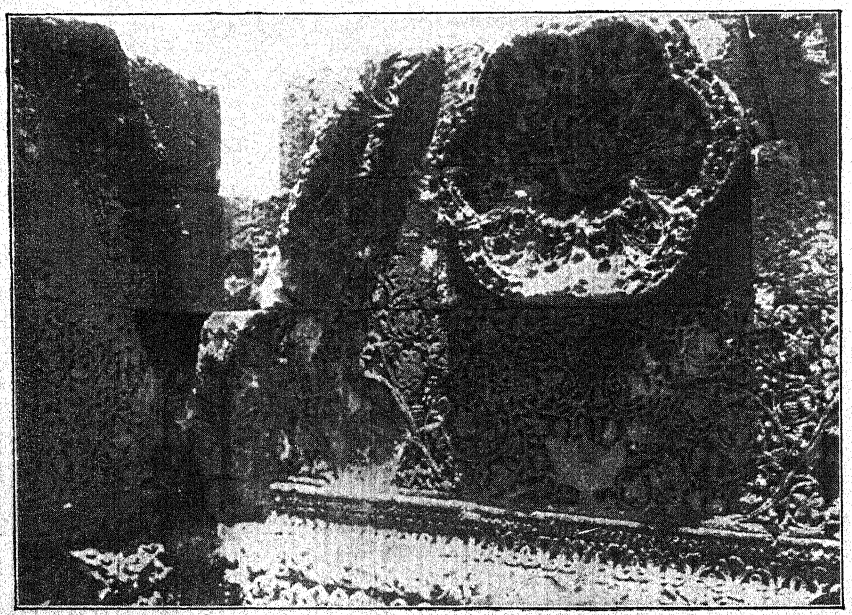


Fig. 762.—Frieze of the Mesopotamian fortress at M'schatta. *(Museum of Berlin.)*

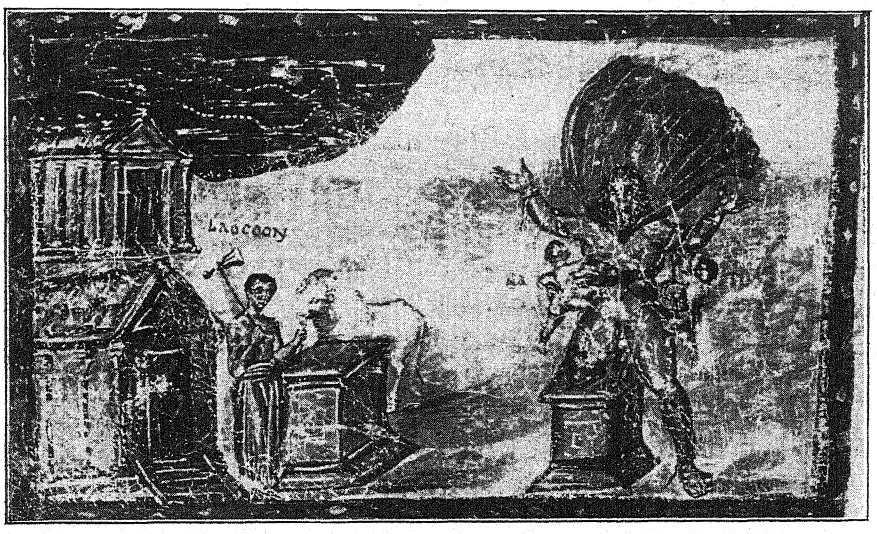


Fig. 763. — Miniature in a manuscript of Virgil. *(Vatican Library.)*

be presented as an example of the most highly developed phase of this style of decoration (fig. 762).

Roman art ascended in a spiral curve. It never stood still and never fell into vulgarity. The same progress may be noted in all its branches and the general trend was always the same. The impressionism of the reliefs with their perspective effect is also found in painting. Both frescoes and ornamental designs, instead of being drawn with sharp outlines, were composed more and more as time went on of masses of color skilfully combined in such a manner as to produce an effect of depth. We also find in painting the same "continuous style" as that seen on Trajan's Column. There is a transition from one scene to another like a succession of dissolving views. The miniature in a manuscript of Virgil reproduced in figure 763 is an interesting example of this style. We see two episodes from the story of Laocoön as related in the Aeneid. On the left, the priest, Laocoön, is about to sacrifice a victim before a temple, but in the sea in a corner of the picture are the two serpents which are to strangle him. On the right we see the death of Laocoön and his two sons beside the same altar which we saw in the previous episode. There is no line between the two pictures any more than there is between the various scenes portrayed on Trajan's Column. This treatment is very important in the history of art, for in the Middle Ages religious stories are illustrated in the same way. A picture portrays, not a single action alone, but an entire narrative.

The miniature in Virgil's Aeneid in the Vatican belongs to a fifth century manuscript, but it is probably a crude copy of an older original. It is by means of these miniatures that we begin to understand the decorative illustrations of which the Middle Ages produced such splendid examples. It is very probable that this art was also Hellenistic and extensively cultivated in Alexandria.

The frescos of Pompeii and Herculaneum indicate that the principles of

perspecptive, founded on what we call the vanishing point, were unknown. In any case they were not popularly employed. Practise had thaught the painters a certain rudimentary perspective of line by which a number of different planes were suggested, but it is very evident that the problem of the third dimension in space was never really solved. The painters of ancient times were more fortunate, however, in their attempts to produce what we might call atmospheric perspective. Here an effect of light intervening between the various planes was presented with considerable realism.

Summary. — During the reigns of the Flavian and Antonine Emperors, who succeeded the Claudian House, Roman art continues to progress. Vespasian, the first of the Flavians, built a new palace on the Palatine and an amphitheatre called the Colosseum on the site occupied by Nero's gardens. Titus erected an arch to commemorate the capture of Jerusalem, and he and Domitian constructed a number of other handsome structures at Rome. Under the paternal and able government of Trajan the Roman Empire enjoyed a long period of prosperity, during which many public works were constructed throughout the empire. Trajan's arch at Beneventum bears testimony to the liberality of the Emperor, and the Forum and carved column named after him are a record of his military campaigns. Hadrian, too, was a great lover of architecture and planned and supervised the building of the temple of Venus and Roma. Hadrian's Villa bears witness to the eclectic tastes of this Emperor with its large vaulted halls. He built the Pantheon with its enormous vaulted dome 136 feet in diameter. Marcus Aurelius erected another triumphal column, an arch the reliefs of which are preserved in the Capitol, and the temple of Antoninus and Faustina, the remains of which are still standing in the Roman Forum. The temple of Neptune may also date from Hadrian's reign. Its base is ornamented with figures personifying the various provinces, which are new representations of the peoples ruled by Rome. The last sculptural types created by ancient art are the statues of barbarian prisoners and the idealization of Antinous, a favorite of Hadrian. The portraits dating from this period have a realism that is extraordinary. This is true, not only of the portraits of the emperors, but also of those of private citizens of Rome and the provinces which are possibly even finer. Sculptural decoration, which was at first delicate and carved in low relief, began to cover the plain surface of the background until the latter almost completely disappeared. This made it necessary to outline the decorative pattern with deep incisions making it stand out from the deep shadows which it cast.

Bibliography. — W. ALTMANN: *Die italienische Rundbauen*, 1906. — CALDERINI, PETERSEN and DOMASZEWSKI: *Die Marcantonsäule aus der Piazza Colonna*, 1896. — P. GUSMAN: *La ville impériale de Tibur*, 1904. — A. STRONG: *Roman Sculpture*, 1907. — E. COURBAUD: *Les bas-reliefs romains à représentations historiques*, 1899. — CH. HUELSEN: *Le Forum romain*. — C. CICORIUS: *Die Reliefs der Trajanssäule* 1896. — J. FROTHINGHAM: *The Triumphal Arch at Beneventum*, 1893. — J. J. BERNOUILLI: *Römische Ikonographie*, 1894. — L. DIETRICHSON: *Antinoos*, 1884. — W. AMELUNG and H. HOLZINGER: *The Museums and Ruins of Rome*, 1906. — H. JONES: *A Catalogue of the Sculptures of the Museo Capitolino*, 1912. — P. GUSMAN: *L'art décoratif à Rome de la fin de la République au IV siècle*, 1905. — A. RIEGL: *Die spätrömische Kunstindustrie*, 1901. — S. STRZYGOWSKI: *Orient oder Rom*, 1901.

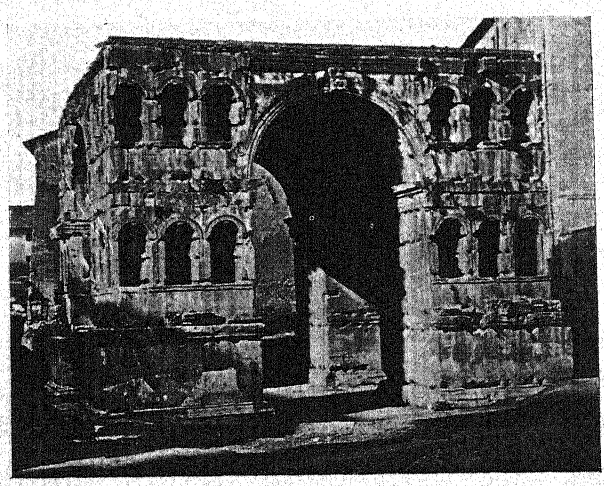


Fig. 764. — Arch called Janus Quadrifons. ROME.

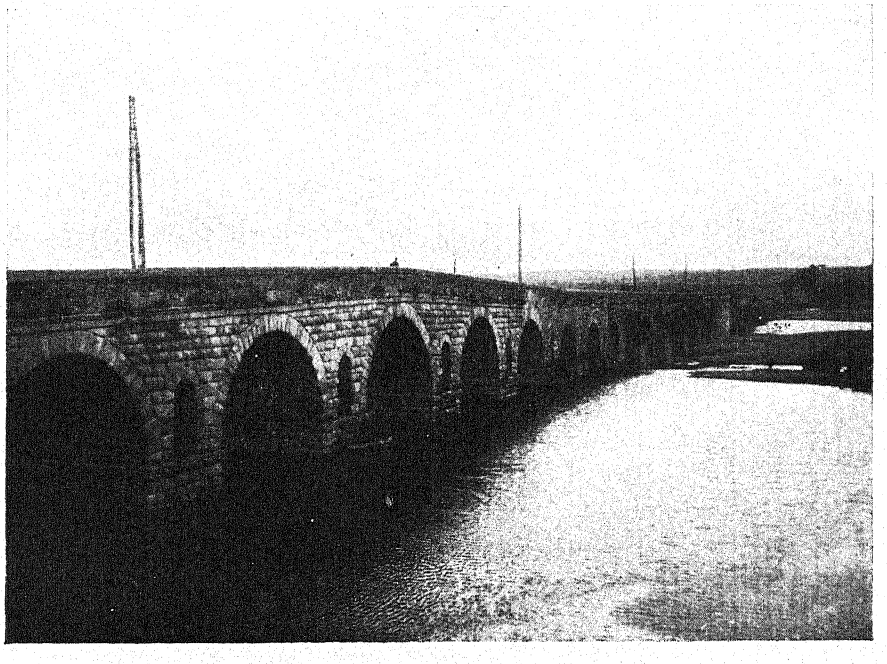


Fig. 765. — Roman bridge over the Guadiana. MERIDA. *Spain.*

CHAPTER XX

ROMAN ART IN THE PROVINCES. — ROADS AND CITIES.
THE ART OF THE LEGIONARIES. — ROMAN ART IN THE ORIENT.
ORIENTAL RELIGIONS. — THE DECADENCE OF ART IN ROME.

By the middle of the second century A.D. the Imperial government had covered the Roman world with routes of communication. These highways, paved with polygonal blocks of stone, began at the gates of Rome, and constantly forking, their ramifications extended to every part of the Empire. There still exists a mediaeval copy of a Roman road-map that is fairly accurate. It shows most of the principal cities of the Empire and often even the stopping-places along the road, such as the inn of Apii Forum, a day's journey from Rome, where the Christians of the capital went out to meet St. Paul upon his arrival. This map is called the "Tabula Peutingeriana" after the name of the noted German antiquary who discovered it, and is now in the Museum of Vienna. It confirms the various itineraries or lists of cities along certain routes that have come down to us from Roman times. It is true that the outlines of the provinces in the Peutinger map are not very accurate, but the relative positions of the cities and districts are well conceived. In figure 766, which reproduces only the portion of the map covering central Italy, the two arms of the sea on either side are altogether too small in comparison with the size of the peninsula

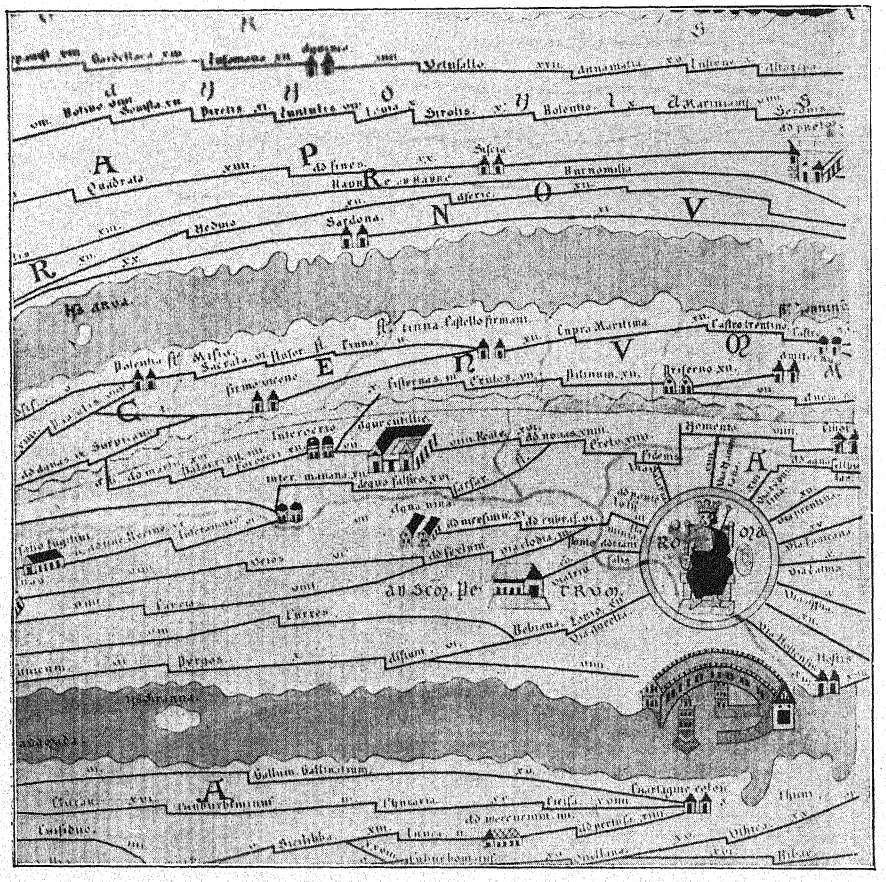


Fig. 766. — A fragment of the Peutinger map showing the roads of the Empire.

itself, that is, the Adriatic above with a portion of Dalmatia, and the Mediterranean below with the colonized portion of north Africa. Rome is marked by the picture of a queen upon a throne, and Antioch and Alexandria are also indicated in the same manner. The representation of Ostia is especially interesting with its semicircular line of warehouses and its lighthouse out in the sea.

Recent excavations at Ostia have at last given us a vivid picture of the great seaports of the Roman Empire with their inhabitants of every race and color and their merchandise from many lands. Besides the streets of warehouses, or *horrea,* in which grain, oil and wine were stored, there were temples dedicated to every religious cult practiced in the Empire, no matter how exotic it was, and residential districts for the various foreign commercial colonies were built up, but all in Roman style. Ostia was the port of Rome and had most of the business with northern Africa; Puteoli on the Gulf of Naples carried on much of the trade with Alexandria; Brundisium (Brindisi) in the south of Italy was the principal military port of embarcation for Greece and the Orient.

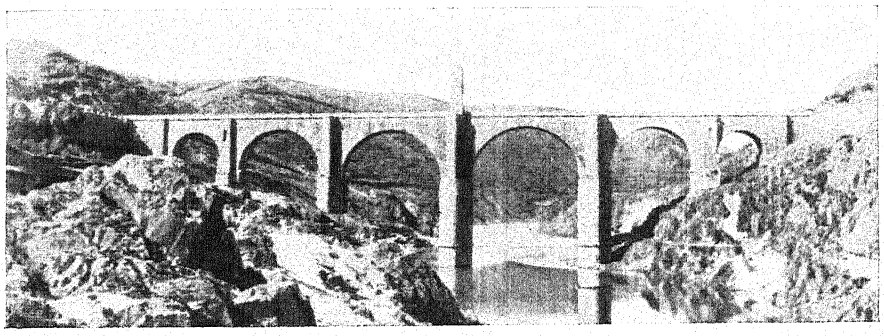


Fig. 767.—The bridge of Alcantara near Caceres.

Great highways crossed the Alps and extended to Gaul, Spain, Britain and Germany. In the St. Bernard pass, which was of such strategic importance to Rome, many votive objects have been found which were offered to the *genius loci*, or tutelary divinity of the mountains. Spain and Gaul were intersected in every direction by these roads, and many of the modern highways in these countries still follow the lines of the old Roman routes of communication. Nearly all the important bridges in the Iberian peninsula are either Roman or have been rebuilt upon the old Roman piers (fig. 765). At one end of the bridge of Alcantara near Caceres is a small shrine dedicated to the deified bridge itself, where the traveller gave thanks in acknowledgment of the service rendered to the traveller by this structure which saved him a long detour (figs. 767 and 768).

But the bridges were not the only great Roman works of engineering. Quite as prominent are the aqueducts which brought water to the cities (fig. 769). One of these in Provence is carried across the Rhone on a bridge known as the Pont du Gard. It has three colonnaded stories with the water conduit running through the upper one. The height of this bridge is extraordinary, and its enormous mass, towering above the torrent of the Rhone, is still the most prominent feature of the solitary landscape. In Spain the three-storied aqueduct at Segovia is well preserved (fig. 770), and the colossal remains of what seems to have been the greatest of all are still standing at Merida (figure 771). The latter is believed to date from the fifth century. The Puente del Diablo, or Devil's Bridge, at Tarragona, is an excellent example of the two-storied Roman aqueduct (fig. 772). The aqueduct at Seville is very plain and is

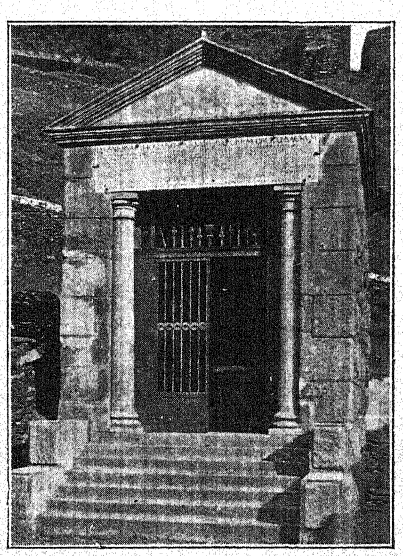


Fig. 768.—Temple at the bridge of Alcantara.

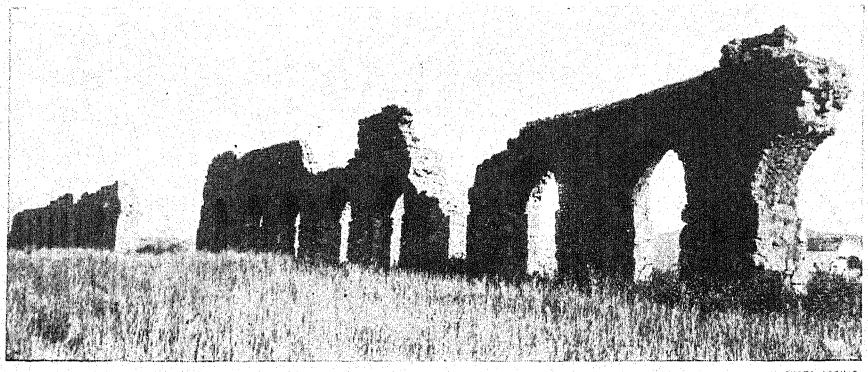


PHOTO ASENJO

Fig. 769. — Aqueduct of the Valley of Guadalerzas. TOLEDO.

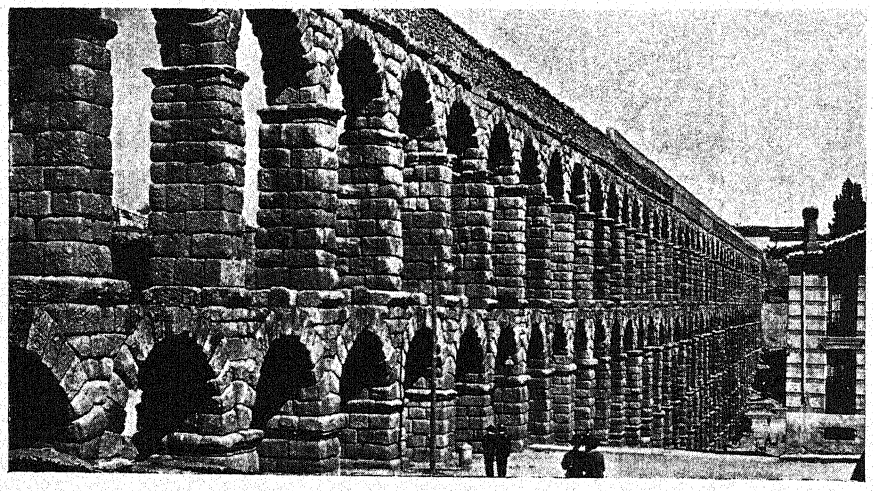


Fig. 770. — Aqueduct at Segovia.

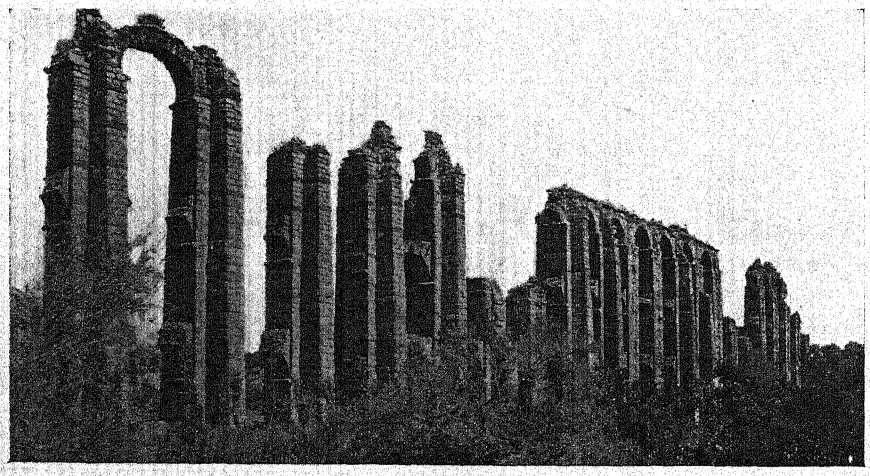


Fig. 771. — Acueducto de los Milagros. MERIDA.

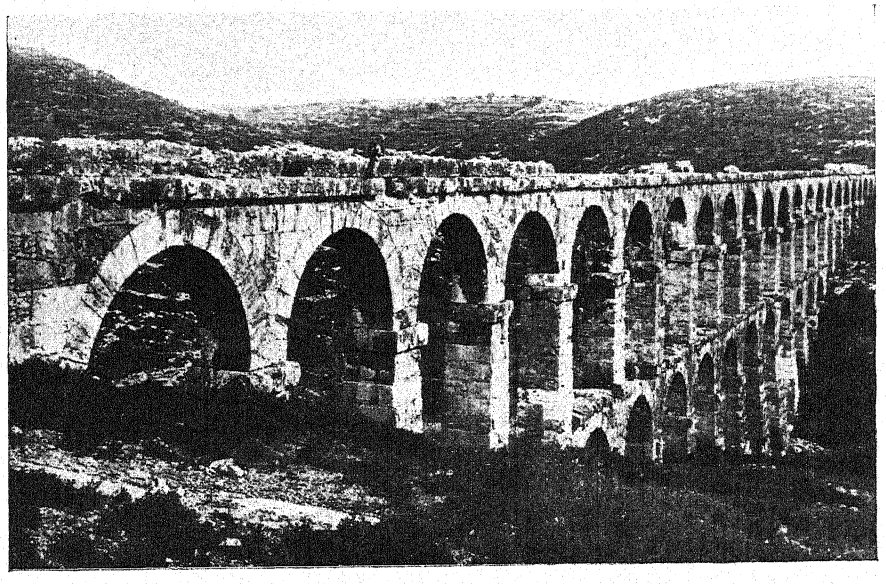


Fig. 772. — The aqueduct known as the Puente del Diablo. TARRAGONA.

called the *Caños de Carmona,* because until recently it brought water to the city from the neighboring town of that name (fig. 773). There were also many aqueducts in Roman Africa, where the water supply is still one of the most important problems of the country. Here a system was designed to store the water from the winter rains in reservoirs into which it was carried by canals on the water-sheds in order that none should be lost. The modern colonists of Algiers and Tunis have little more to do than to restore the hydraulic system of the Romans by rebuilding the walls of the reservoirs and cleaning out the old conduits on the hills above the small valleys.

The gates of both Rome and the provincial cities were usually flanked by two towers of defense. They had semisacred character, and their sites were marked by indications of a religious nature in the *Pomoerium* or walled enclosure. The gates of cities of strategic importance were of colossal size. The famous *Porta Nigra* at Treves in Germany has three colonnaded stories and seems to form part of the Romanesque cathedral which is set against it (fig. 774). Many of the Roman city-gates of Spain have been preserved; indeed, some of the towers of one of the gates of Barcelona are still Roman. Many Castilian cities still have their old Roman gates, more

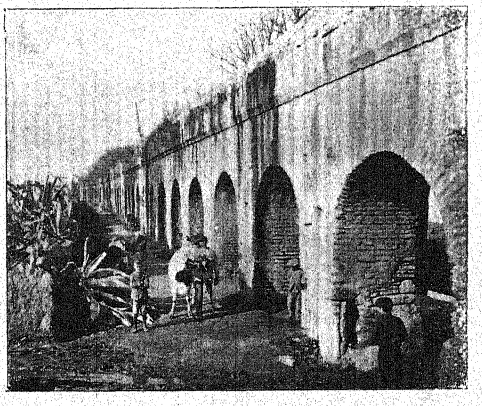


Fig. 773. — The Caños de Carmona. SEVILLE.

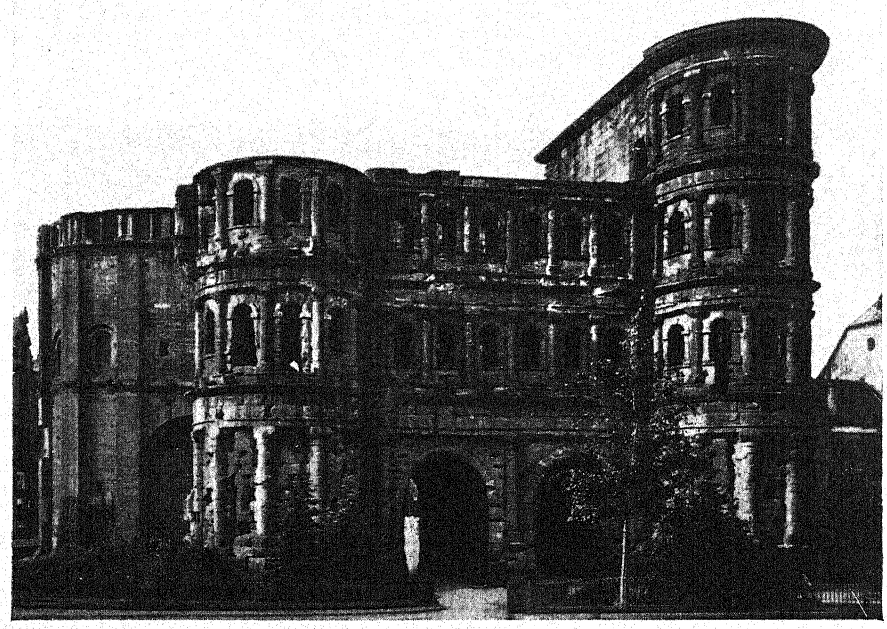


Fig. 774. — The Porta Nigra. TREVES.

or less altered in the course of the Middle Ages. Along the walls of a city towers were set at intervals. Sometimes these were square as at Barcelona, or round as at Lugo, where the Roman wall is still almost intact. In Spain alone we might mention the walls of Tarragona, Leon and Avila, and a portion of those of Toledo, Merida and Cordova.

The Roman city was usually arranged according to the old Italic plan with two principal streets, the *cardo* and the *decumanus,* which intersected one another at right angles and divided the city into quarters. This principle was applied as closely as the nature of the ground permitted, although later additions to the city often destroyed the symetry of this arrangement. Nevertheless, these two main streets can almost always be recognized in a Roman city. At their intersection was the Forum, a large square, usually surrounded by a colonnade in which

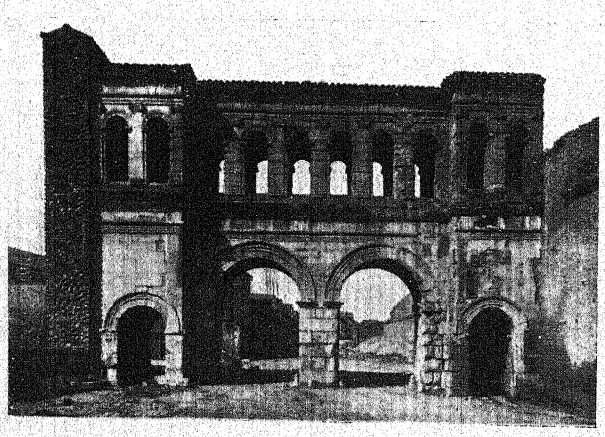
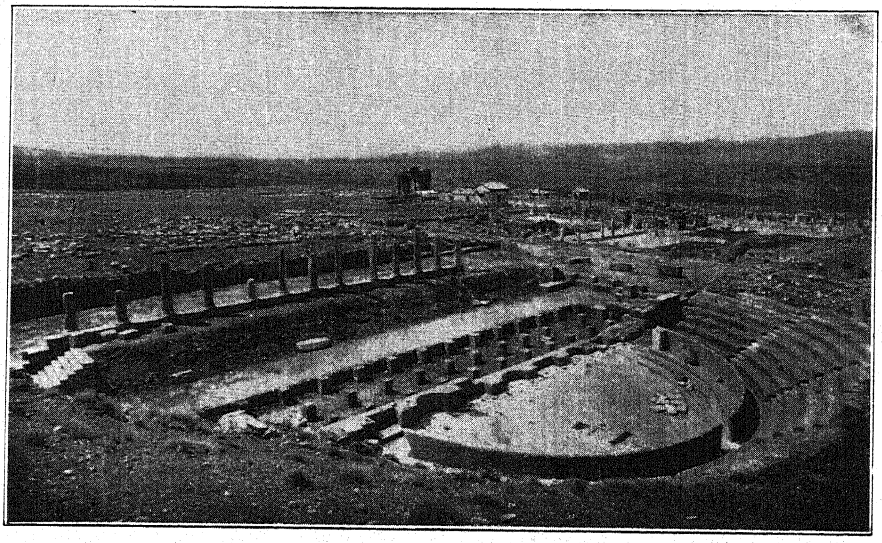


Fig. 775. — Gate of Saint André. *Autun.* FRANCE.



A

B

RUINS OF TIMGAD (Roman Africa). — *A*. General view of the city from the theatre. *B*. Trajan's Arch at the entrance to the Forum.

Fig. 776. — Ruins of the Forum. POMPEII.

there were shops. Here, too, was the basilica or tribunal. The best known example of the Forum of a small city of second rank is that of Pompeii. In figure 776 we see this square with its new marble columns which were being erected when the city was destroyed. In figure 777 we see the older portion of the same Forum with brick columns covered with stucco. Here, too, is the simple public fountain ornamented with a mask and similar to those at the street intersections. Behind the Forum of Pompeii is the high *podium* of the temple of Jupiter with the remains of some of the columns. On either side, stripped of their marbles, are the triumphal arches raised in honor of the Emperors who had especially distinguished themselves as protectors of the city. These served as monumental entrances to the large square. One of these arches was dedicated to Augustus and the other to Nero, whose equestrian statue surmounted the latter.

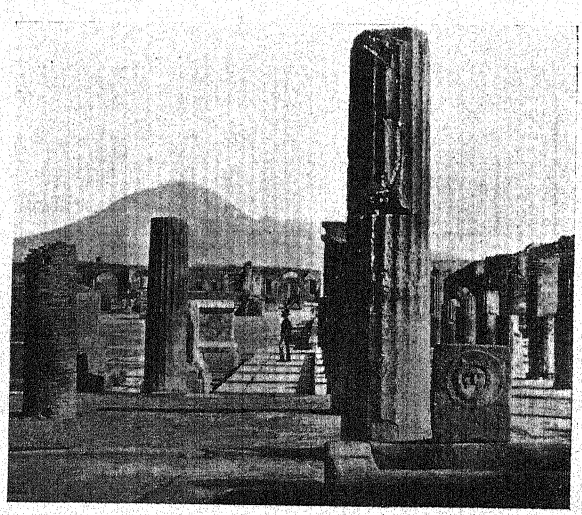


Fig. 777. — Public fountain in the Forum. POMPEII.

Timgad, a city of Northern Africa founded

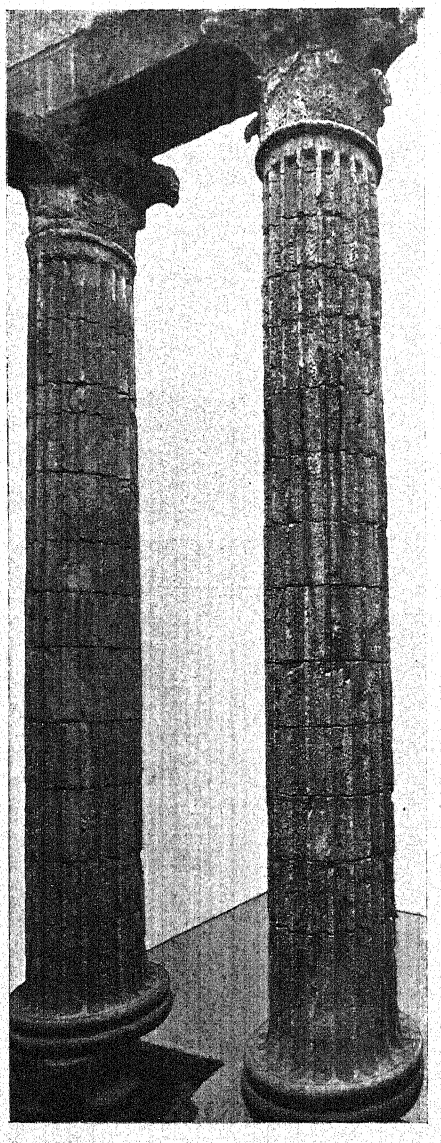


Fig. 778.— Columns of a Roman temple. BARCELONA.

by Trajan at the beginning of the second century, is, after Pompeii, the best preserved example of a Roman city with its various details that has come down to us. Here is a Forum with its porticos and fountains, nor was sanitation neglected. The principal temple of the city is just beyond it and near by is an arch dedicated to Trajan, the founder of the city. (Plate LVI.) Close to the intersection of the two main streets (the *cardo* and *decumanus)* of Barcelona the remains of a fourth century temple are still standing. It seems probable that this replaced the older temple of the Forum itself (fig. 778). Besides the principal Forum, there were often others of lesser importance as at Rome. Even a small city like Pompeii had another one near the city walls which was triangular. Outside the Forum, there were other smaller temples dedicated to the lesser gods. In Pompeii there was a temple dedicated to Apollo, one to Isis, one to Mercury and also one to Aesculapius. Even rural hamlets like Vich in Spain (from *vicus,* a street), which were mere clusters of houses which sprang up along the main highways, had a modest temple of the local stone, set upon a high *podium* and usually built in the Doric style. One feature of a Roman city as indispensable as the theatre, possibly even more so, was the amphitheatre. In northern Africa, in places where no trace of the cities themselves still remain, the colossal ruins of these amphitheatres fill the traveller with amazement. Two in Provence are still in an excellent state of preservation; these are at Arles and Nimes (fig. 779), and their colonnaded façades resemble that of the Flavian amphitheatre at Rome, although they are built on a smaller scale. Very similar are those of Padua and Verona, and especially the one at Pompeii which was set outside the city in order to take advantage of the mountain slope in constructing the tiers of seats on one side. The other is supported by sustaining walls and

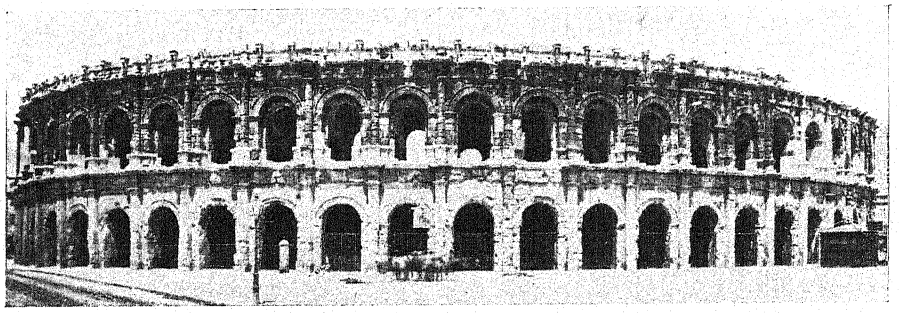


Fig. 779. — Roman amphitheatre. NIMES.

vaults. Of all the Roman amphitheatres that have been preserved, the one at Pompeii is the most ancient (fig. 780). Many inscriptions refer to it and reveal the fact that in the city it was known antonomastically as "The Spectacle". The Pompeiian frescoes picture the gladiatorial combats, and the inscriptions found in the city bear witness to the intense interest that the populace took in these entertainments. The Roman nobles who spent their summers at Pompeii spent lavish sums in entertaining the people of the city with the games of the arena.

In Spain, the ruins of the amphitheatre at Tarragona still exist, but at Merida and Toledo only the elliptical outlines now remain. The amphitheatre at Italica is in a better state of preservation; its tiers of seats rest upon an enormous mass of concrete which contains the well arranged vaulted passages through which the spectators entered and went out (figs. 781 and 782). Besides

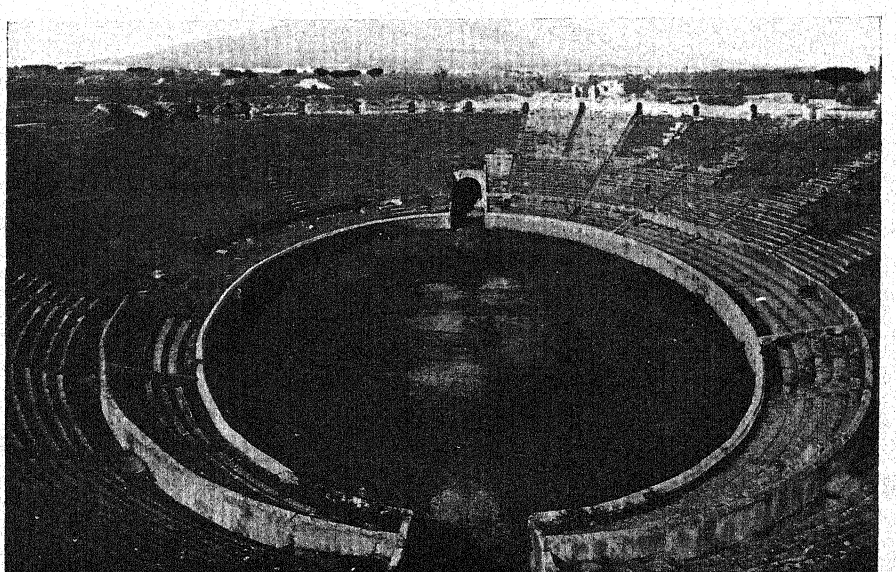


Fig. 780. — Interior of the amphitheatre. POMPEII.

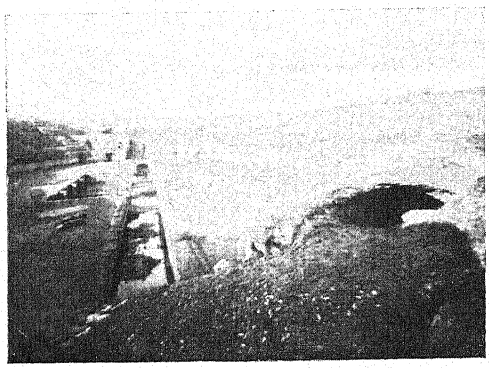


Fig. 781. — Amphitheatre at Italica.

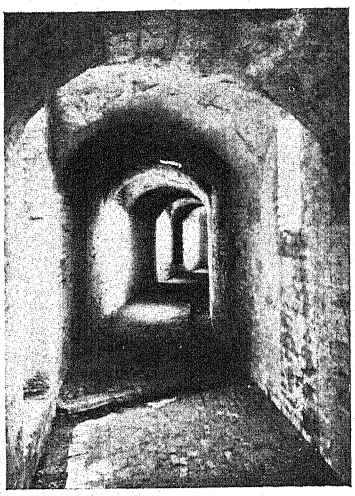


Fig. 782. — Interior passageways in the amphitheatre at Italica.

the amphitheatre, most Roman cities of importance had both a circus and a theatre. The best preserved of the theatres of the Roman Empire are at Orange in Gaul, Bosra in Syria, Thugga in Africa (fig. 783), and at Merida, Ronda and Sagunto in Spain (figs. 784, 785 and 786). Not only have the tiers of seats been preserved in some of these, but portions of the stage as well. The wall of the latter was often ornamented with columns. (Plate LVII.)

Another important feature of the Roman city was its public bath. Those of Pompeii and Timgad are in an excellent state of preservation. They were of especial importance at places where mineral springs existed *(aquae calidae)*, and we find them both in Asia and far-off Britain. The ruins of the *thermae* at Bath, England, still bear witness to the popularity of these provincial watering places.

There was another type of town quite different from the cities which have been mentioned; this was the fortified camp of the legions. These military cities were laid out according to a standardized plan, and in the camp constructed by Scipio at Numantia during the Republican period we see the same system which was later followed under the Empire. Within the walls was a more or less rectangular enclosure containing the two streets of soldiers' quarters and other larger buildings for the higher officers of the camp. Later these fortified camps were only built on the frontiers of the Empire. In the subject provinces the ordinary police were sufficient to preserve order. In Vespasian's time, for example, the only legion in all Spain was the

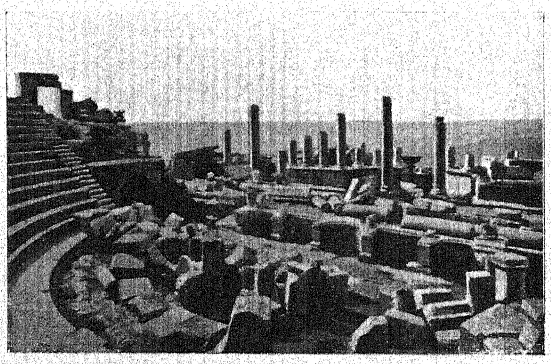


Fig. 783. — Theatre at Thougga. *Northern Africa.*

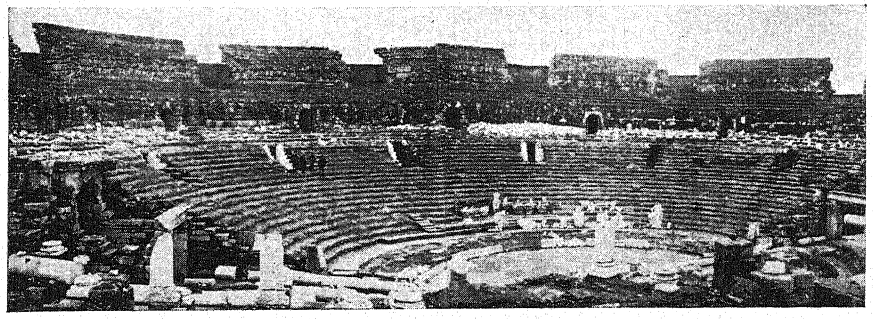


Fig. 784. — Roman theatre. MERIDA.

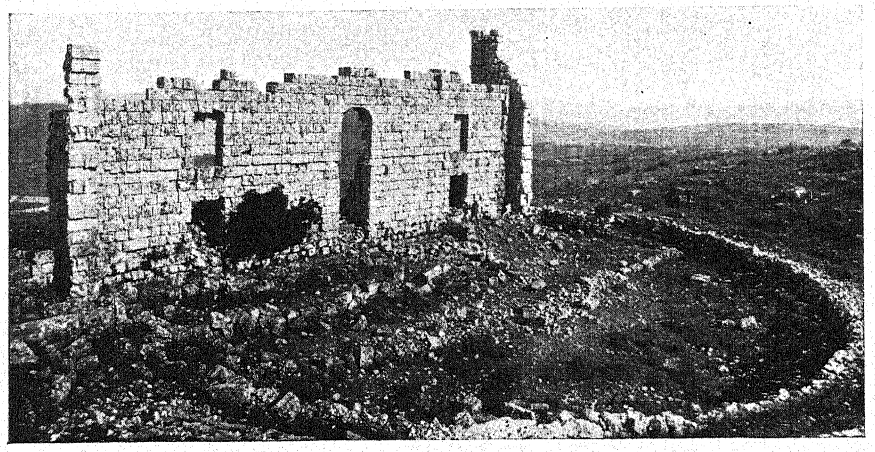


PHOTO ROIG

Fig. 785. — Roman theatre at Ronda la Vieja. GRANADA.

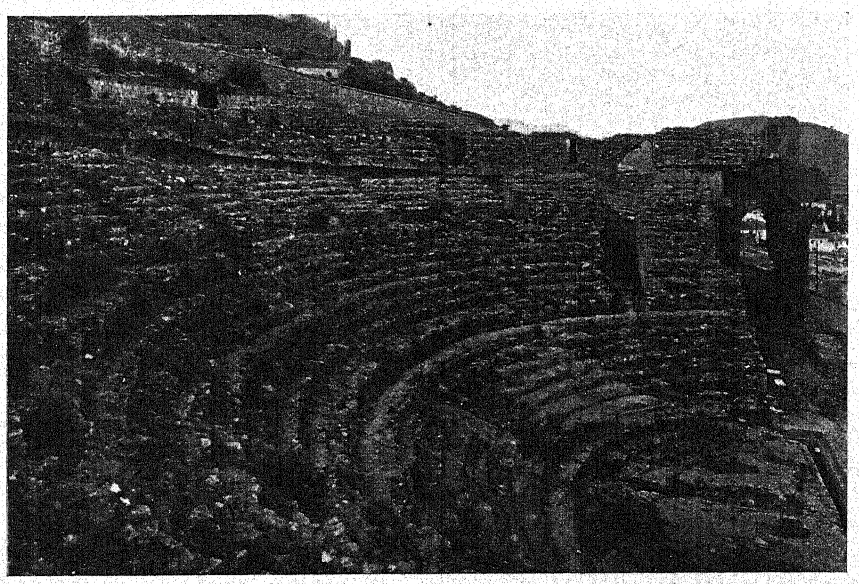


Fig. 786. — Roman theatre at Sagunto. VALENCIA.

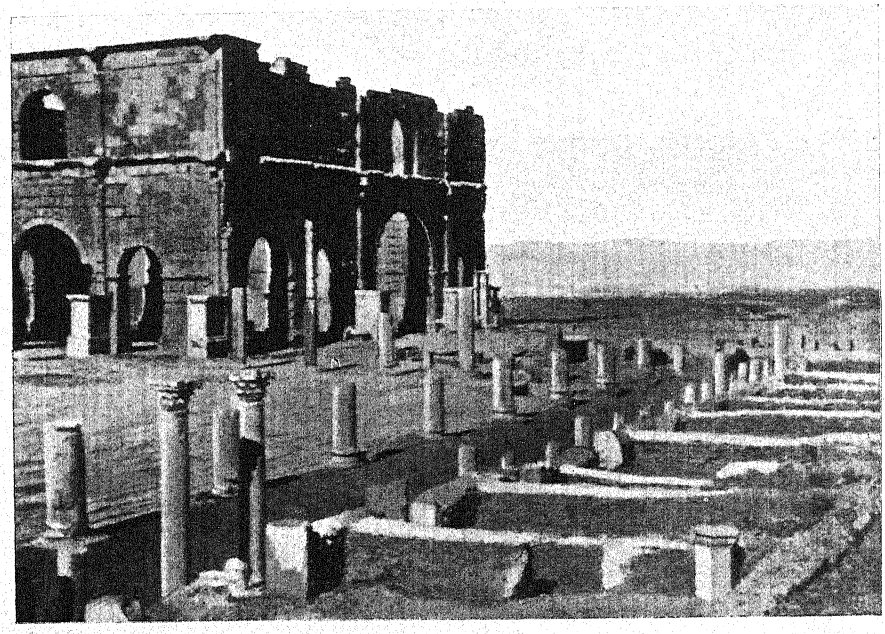
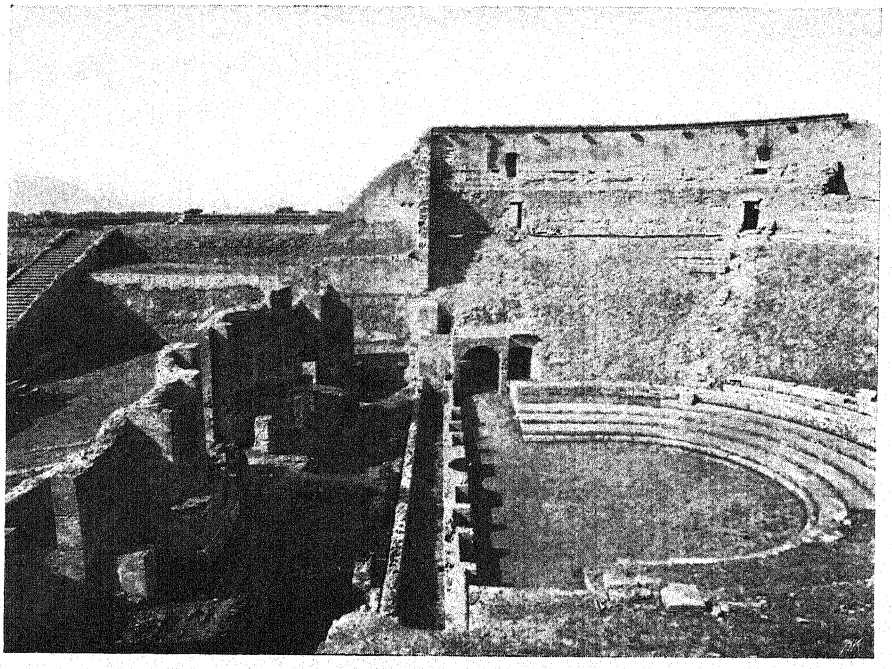


Fig. 787. — The praetorium. LAMBESSA. *Northern Africa.*

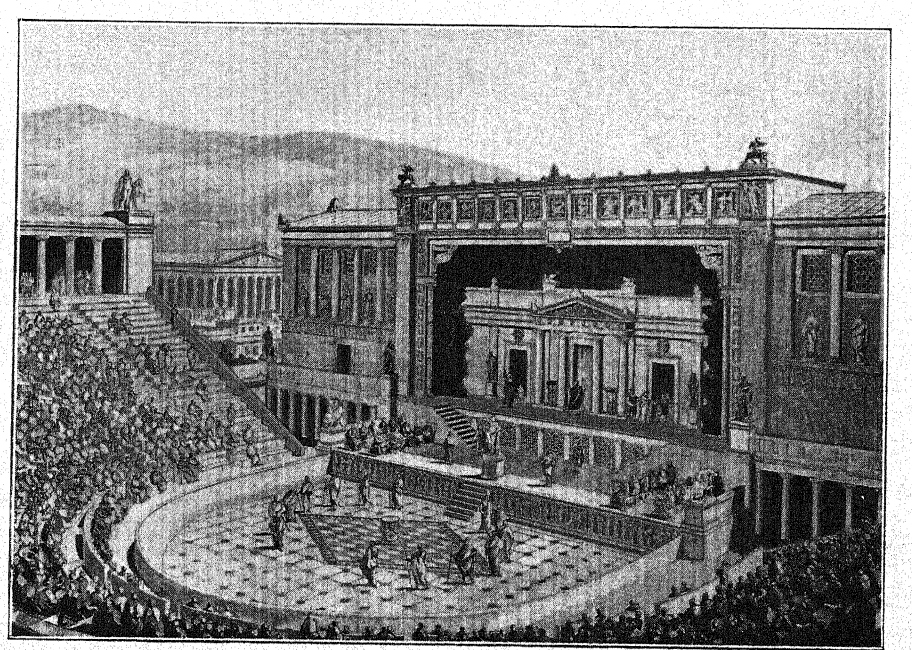
one stationed in Leon. The army was needed along the Danube and in Britain on the north and on the desert frontiers in the Orient. In Africa, although a considerable proportion of the population consisted of peaceful Roman colonists, legions were needed to repel the incursions of the Berbers from the south who boldly raided the colonies from time to time.

In recent years the officers of the French garrisons in Algiers have made excavations under the auspices of the Academy of Inscriptions at Paris. They have explored the ancient military station at Lambessa, constructed by the Third Legion *(Legio III Augusta)* which defended that portion of Mauritania. They found a school and baths, and along the two porticoed streets were the cells which formed the soldiers' quarters. At the intersection of these two streets was a building which has been called the *praetorium* (fig. 787). The interior consists of a large hall with arches on all four sides which may have served as an assembly-hall for the soldiers. The upper floor probably contained the apartments of the commander of the post. From these remains at Lambessa we learn much concerning Roman army life in the frontier stations. Not far away Timgad was built to accomodate the families of the soldiers, for many were married. Soon, however, Timgad was found to be too far away from the camp, and a town grew up at Lambessa itself adjoining the station.

In Germany also many remains have been discovered of the fortified camps of the legions. A restoration has been made of one at Salzburg. On each side of the gate was the statue of an emperor. The legionaries had their own artists and even went so far as to show a taste for commemorative structures, indicating a feeling of permanency which we are not apt to associate with a military outpost



Roman theatre. POMPEII.



Restoration of a Roman theatre.

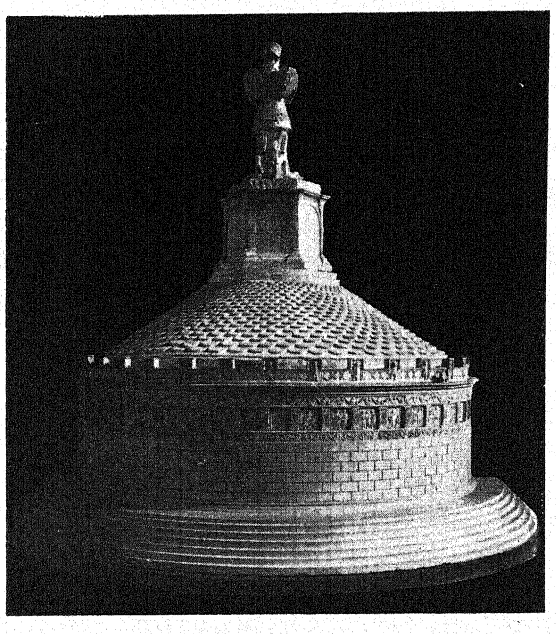


Fig. 788. — The Trophies of Trajan. *Adam Klissi.* ROUMANIA.

Fig. 789. — Germanic warrior. *(Museum of Citli.)* HUNGARY.

today. The most important of these, from an artistic standpoint at least, was the great monument near Adam Klissi in Roumania, still called "The Trophies of Trajan" (fig. 788). This was a large solid structure of circular form, ornamented with a frieze of pilasters alternating with metopes. It was covered with a truncated cone surmounted by an octagonal tower supporting the trophies. This remarkable structure was found out on the bare plain, stripped of its stone covering, but fortunately it has been possible to recover the reliefs of the metopes which show the style of this monument to have been decidedly peculiar, especially in its decorations. These semibarbaric compositions with their numerous figures in low relief resemble somewhat the earlier mediaeval reliefs. Indeed, it was not many years ago that they provoked a long controversy as to their date. Excavation on a large scale was undertaken in consequence of this discussion and the question was finally solved. Not only did they find many fragments of these sculptures, but an inscribed tablet was discovered proving beyond question that the monument at Adam Klissi was constructed during the reign of Trajan between the years 108 and 109 A.D., *in honorem et memoriam* of the strong men who had there given their lives for the State. A list of names follows in which we find that of a soldier who was a native of Pompeii, and born, of course, before the destruction of that city.

When the artists of the legions attempted to carve figures in the full round, their work was as rude as the relief of Adam Klissi, sometimes even more so. The museum at Cilli (the ancient Claudia Celeja in Pannonia) has long pos-

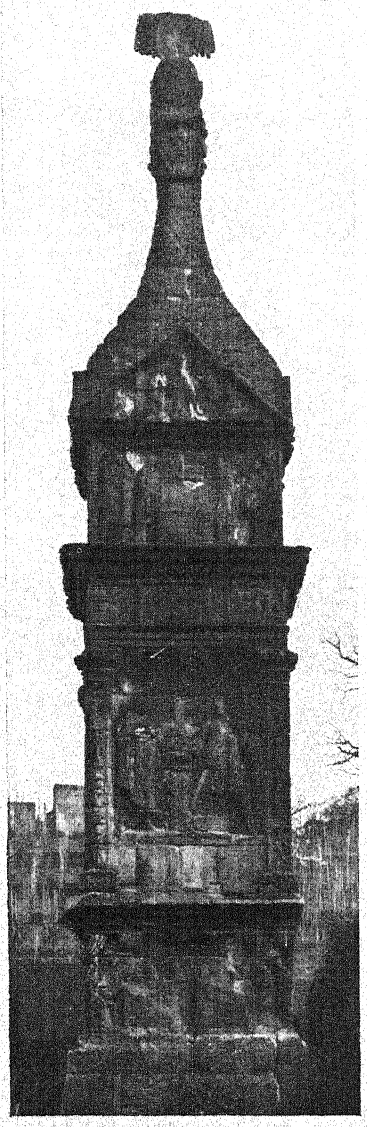


Fig. 790. — Monument at Igel.

sessed a statue of one of the commanders of the frontier legions. We see from his stiff moustache and heavy brows that he was no Roman. The shallow cavities which mark the pupils of his eyes indicate that they were light colored. He is dressed as a Roman officer with a paludament hanging down over his legs and wearing a breastplate. He is evidently of high rank, for his right hand is raised in the gesture of *allocutio,* and he appears to be addressing his troops.

Many other works in the same style have been discovered in the course of the archaeological exploration of the old German frontier defended by the legions. Tombs received especial attention, and their style was imitated by the civil population living near the camps. Often these legionaries seem to have possessed more of the refinements of life than did the semibarbaric population of the province in which they were stationed. The merchants and farmers of the country received only the art of the legionaries, and these, in turn, had an art all their own which was influenced somewhat by their contact with the different races living on the frontiers of the Empire. Characteristic of this provincial art, which was largely derived from that of the legionaries, is the so-called Igelsäule. This column is ornamented with reliefs and is really the tomb of a family of merchants named the Secundini (fig. 790). It was erected beside the Roman road leading from Treves to Reims on the spot where the town of Igel is now situated and has been preserved almost intact to this day. Its lower portion is ornamented with reliefs, and it is covered by the pyramidal top not unusual with Roman tombs from the first years of the Empire. The reliefs represent Mars and Rhea Silvia and Perseus and Andromeda which are allusions to life in the underworld. On one side are represented the members of the family who erected the monument, and above them are medallions containing portraits of the deceased. The whole is surmounted by an eagle, the symbol of the resurrection.

The people of these provincial towns had a love for scenes taken from everyday life, and we often obtain an interesting picture of Roman customs du-

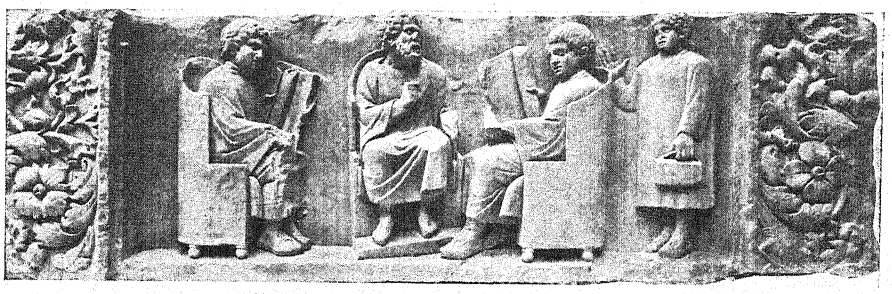


Fig. 791. — Tutor and pupils. Grave-relief from Neumagen.

ring the last years of the Empire. Some reliefs from a destroyed tomb near Neumagen, now in the museum at Treves, display a charming frankness in their portrayal of intimate scenes from family life. We see a family tutor instructing his charges (fig. 791); a noble lady is having her hair dressed (fig. 792); the presentation of a gift and the payment of a debt are represented (fig. 793). In all of these scenes, both the furniture and the costumes of those taking part are evidently provincial.

It is interesting to compare the furniture, costumes and setting of these Romanized Germans with those shown on Trajan's Column. In the latter we see barbarians living in huts and poorly equipped except for their arms, but to the Neumagen reliefs we owe much of our knowledge of private life in the provinces, just as the paintings and drawings found at Pompeii have familiarized us with that of southern Italy. If we compare the scenes depicted on the Greek vases with these reliefs found in Germany, we see a very different treatment of the subject of the tutor instructing his pupils and the Greek lady in the hands of her hair-dresser. As in our own times, life in these northern Roman provinces was much more reserved and modest in its outward manifestations.

Fig. 792. — Noble lady having her hair dressed. *(Museum of Treves.)*

Often the grave-monuments of these provinces consisted only of simple stelae which were poor imitations of the characteristic Greek funeral stelae. Occasionally one bears a portrait enclosed in a small niche or in a medallion. Again we see a

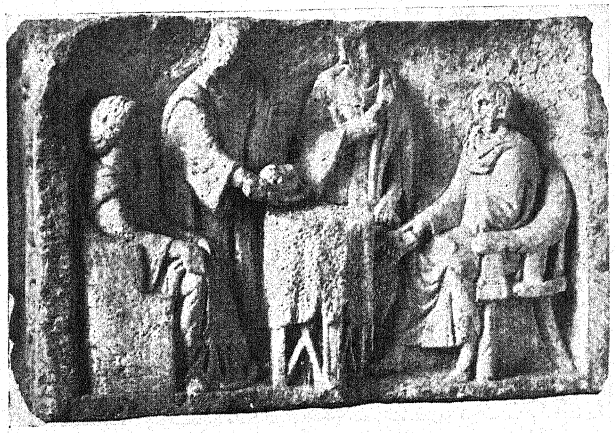


Fig. 793. — Payment of a debt. Neumagen relief.
(Museum of Treves.)

number of family portraits on the same monument, as on the stelae in the Museum of Gratz (fig. 794). Another type of stela is found in Spain; here a horseshoe-arch is combined with a sort of whorl, numerous examples of which have been preserved in Leon and in the Museum of Madrid (fig. 795). This horseshoe design was employed by the Visigoths in Spain and later by the Arabs who seem to have taken it from the Visigoths. It is hardly likely, however, that this is a native Spanish feature, for we do not see it on the ancient Iberian monuments, while it does frequently occur in Syria and Asia Minor. As most of the stelae ornamented with this design were found in Leon, where a Roman garrison was stationed, it is reasonable to conclude that the horseshoe arch, so prominent in Spain in later times, was brought there by the legionaries from far-off Syria. Roman garrisons were not often moved, but when an Imperial decree sent them from one province to another, the soldiers were accompanied by their families and modest household furnishings. Surely they did not leave behind the customs, religion and art of their native land.

It is, therefore, hardly to be wondered at if we note a certain uniformity in both the military reliefs of Adam Klissi and the sculptures of Roman Spain. It is also safe to conclude that the Romanesque art which grew up in the provinces after the complete decadence of Roman art was influenced more by the art of the legionaries than by the official art of Rome itself. It seems likely that the vulgar Latin of the early Romance documents was the language of the military stations, for this would explain the traditions, popular songs and grammatical forms common to the different peoples who later became the European nations of the Middle Ages.

Only one of the provinces possessed an art more vigorous and more monumental in character than that of Rome. This was the Orient, the classical land of architecture. Here the artists of the legions were not thrown upon their own resources as in Germany. The military stations along the desert frontiers are magnificent affairs. They were constructed of large blocks of stone, and their great buildings defied the proud castles of the Persian Sassanids lying just beyond the Roman border.

All the Syrian cities were rebuilt during the Roman period. The Asiatic provinces were the most flourishing of the Empire, and their wealth often made

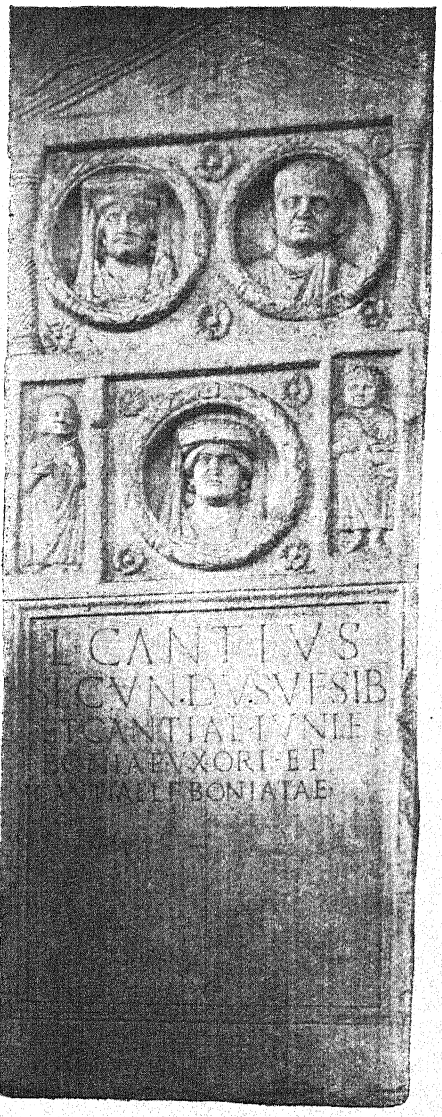


Fig. 794. — Stela of Cantius Secundus.
(Museum of Gratz.)

Fig. 795. — Stela of L. Aemilius.
(Museum of Madrid.)

their financiers the bankers of Rome itself. To safe-guard the Roman government along the Oriental frontier, the cities of Baalbec, or Heliopolis, and Palmyra were constructed with a magnificence that amazed even the people of Asia. It seems safe to conclude that they were built upon the sites of ancient Semitic sanctuaries, sacred to the peoples of the desert. This certainly is indicated by the worship of the sun practiced in these cities. The hypethral form of their temples with a central court open to the sky, as well as other details of these gigantic structures, leads us to suspect that Oriental architects collaborated in their construction. The Romans, it is true, soon abandoned these cities and withdrew their legions toward the Mediterranean, but the oases of Palmyra and Baalbec still remain the marvels of the desert (fig. 796).

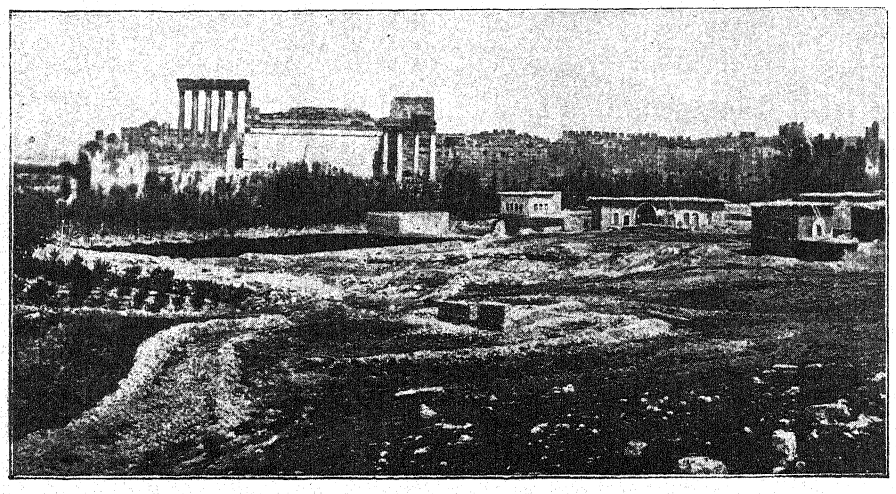


Fig. 796. — General view of Baalbec. SYRIA.

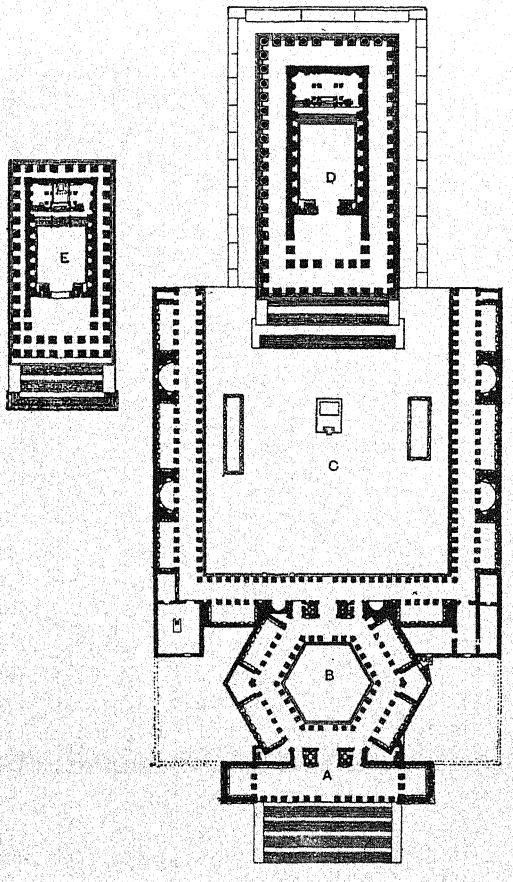


Fig. 797. — Plan of Baalbec.

The plan of Baalbec shown in figure 797 gives us some idea of the arrangement of this sanctuary. The entrance (A) is a portico of ten columns leading to a hexagonal court (B). Behind this is a great court (C) which contains an altar and two cisterns not unlike the bronze fountain of the temple of Jerusalem. Beyond is the great temple of the Sun (D), set upon a *podium* and surrounded by a peristyle of Corinthian columns, but its *cella* is an open court, the walls of which are ornamented with pilasters and niches. Beside the principal temple, so frankly Semitic in character, is the temple of Jupiter (E), of which only six of the columns of one of the lateral façades remain standing (fig. 798).

Besides the great religious centres at Baalbec and Palmyra, other cities on the Syrian frontier attained wealth and

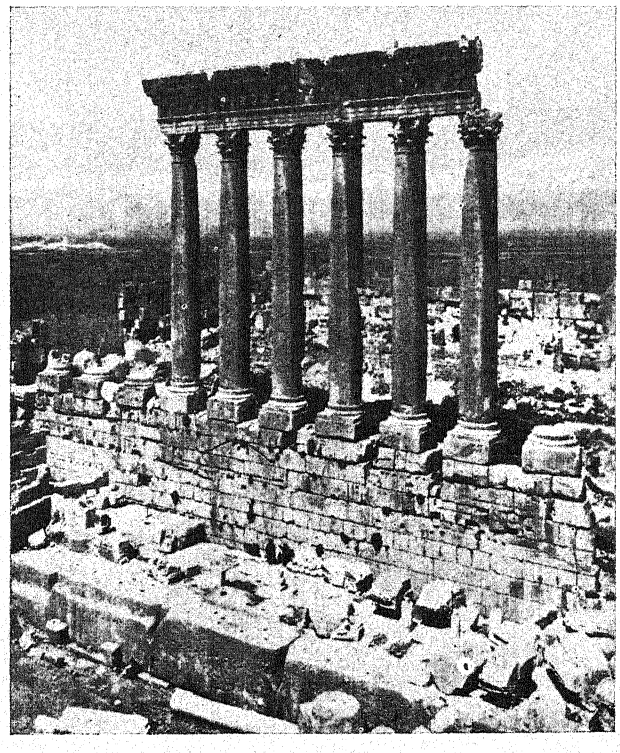


Fig. 798. — Columns of the temple of Jupiter. BAALBEC.

prosperity by means of their hold upon the trade between the Asiatic nations and the Romanized provinces. Typical of these was Petra, situated on the further side of the Jordan and inhabited by Romanized Nabatean Arabs. This city owed its importance to its situation on the edge of the sandy wastes which could only be crossed by means of camels. Here the caravans discharged their freight, which was then loaded on mules to be transported across the rocky country which lay beyond. Roman authority was never very firmly established at Petra, nor did it last long, but, nevertheless, we still find on the bare hills where the city once lay the remains of a theatre and great numbers of rock-cut tombs. Most of these follow the same semiclassical style with pilasters and architrave, and above them is an odd step-like ornamentation somewhat resembling a battlement (fig. 799). One of these, called "Solomon's Treasury" by the Arabs (fig. 800), appears to have been a temple similar to the so-called El Deir or monastery (fig. 801). Both have great façades of two stories cut out of the rock like the tombs. Their columns and temple-like projections have been excavated from the rocky hill. The desert at Petra with its rocks and tombs is one of the most interesting spots in the Orient. This great necropolis beyond the Jordan has an artistic style all its own. The Roman architectural forms are but its external trappings; its spirit is purely Asiatic. Although they lived in contact with the Romanized towns and cities and with the military posts where the legions were stationed, the Semitic population of Syria and Mesopotamia never lost the artistic sentiments of their own race. This Arabian Nabataean art was not confined to Petra, but extended up the desert to the north as far as the neighborhood of Baalbec and Palmyra, where they left tombs, stelae and busts, the last representing the deceased in characteristic Oriental costumes and bearing Syriac inscriptions (fig. 802). Only the technique of these sculptures is classical; the attitudes and expression of the faces are completely foreign. In other parts of Syria the fa-

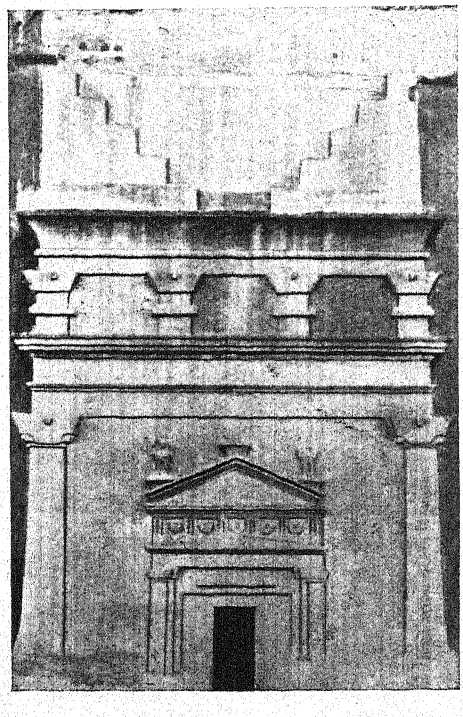


Fig. 799. — Nabataean tomb. PETRA.

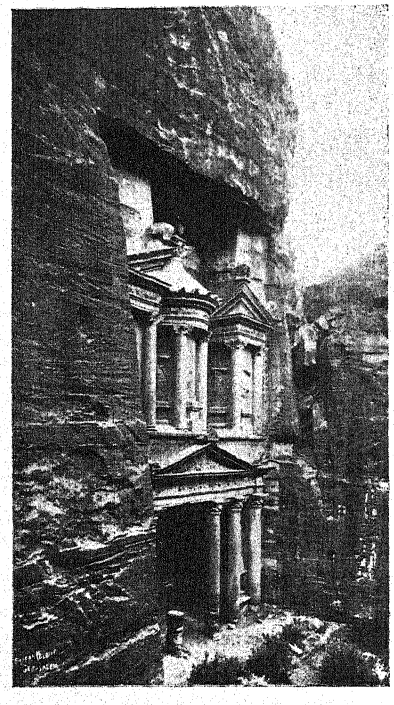


Fig. 800.—The Treasury of Solomon. PETRA.

vorite form of tomb was a small temple *in antis* in which there was a subterranean chamber which contained the sarcophagus (figs. 803 and 804) But the architraves, capitals and other ornamentation present features entirely foreign to Roman art.

An important city in these provinces of which little has been known until recently was Bosra, which retained its wealth and prosperity down to the Christian period. Brünnow's great work, "Die Provincia Arabia", which was the first archaeological survey of the Oriental frontier, gave an account of the stone buildings, the great theatre, the basilica and the Forum of Bosra.

The peculiarities of Roman art in the Orient from the third century on have raised a discussion as to the part it played, not only in the evolution of the older types, but also in the formation of Christian art. Just as the art of the legionaries in the western provinces grew into the Romanesque sculpture of the Middle Ages, so the art of the Orient is supposed to have formed the Christian Byzantine style.

The problem of how great an influence Oriental art exercised upon Rome during its decadence has aroused great interest. We know that there were Oriental architects like Apollodorus of Damascus at Rome from Trajan's time on. Hadrian, no doubt, had both Asiatic and Egyptian artists in his service. New discoveries are constantly casting more light upon the important part played by Egypt in the transformation of ancient art. The beautiful relief discovered in

Cyrenaica, representing the nymph Cyrene rescuing Libya from a lion, shows plainly that the old Hellenic grace had not been lost in the later evolution of form and technique (fig. 805).

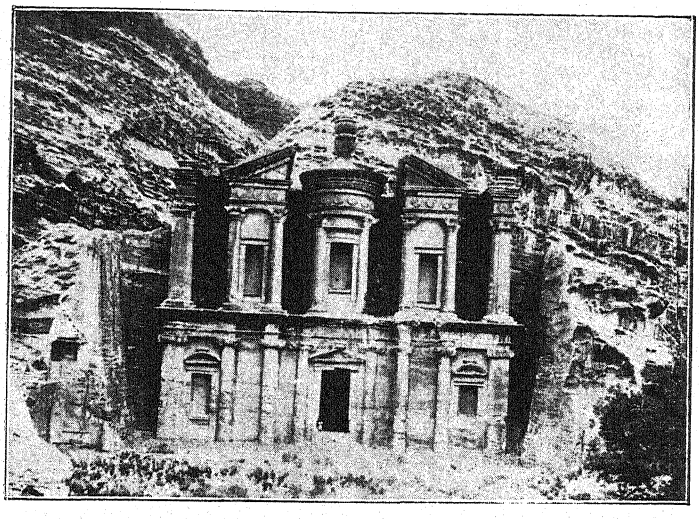


Fig. 801. — El Deir. PETRA.

We know of the great intellectual activity in this province during the third century A.D. from the Greek and Roman papyri found in Egypt. Many Egyptian portraits have also been found painted on ivory and buried with mummies during the Roman period, and these bear witness to the artistic activity of the local Egyptian school. (Plate LVIII.) The faces are rarely animated, but they are expressive of the strange, mystical and refined society found in Egypt during the Roman period. We see youths with crisp hair and women with great black eyes and elongated faces. The style of these portraits is also found in the primitive Christian paintings as well as in certain decorative themes which passed over from Egypt to Rome. Oriental and Egyptian religions seem to have

Fig. 802. — Funeral stela with portraits of a family of Nabataean Arabs discovered at Palmyra. *(Museum of New York.)*

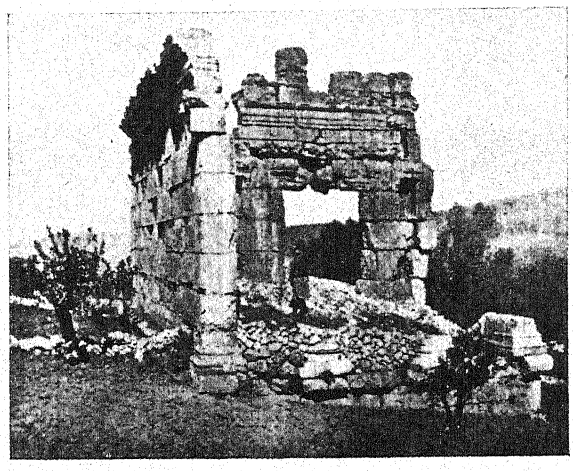


Fig. 803. — Roman tomb in Palestine.

exerted so strong an influence upon Rome that even the appearance of the old gods became changed. Jupiter became Ammon with his horns, or else a god with a Phrygian cap and an axe; Aesculapius was turned into the Egyptian god Serapis, and Diana was represented in the form of the Syrian Diana of Ephesus with her countless breasts (fig. 806). Even a goddess so purely Greek as Minerva took on the wings of the Semitic Cherubim (fig. 807). Most typical of all were the strange and exotic religions which boldly sought converts at Rome. A temple dedicated to some Syrian cult was discovered on the Janiculum in 1911, and there were many Mithraea, or chapels devoted to the Persian worship of Mithras. This god is usually represented as sacrificing a bull, symbol of rebirth, of the sun, and of long life. The worship of Mithras in the provinces was related to that of Mercury, of Cybele, the Magna Mater, of Attis and of the moon. The theme of Mithras kneeling upon the bull which he is sacrificing is

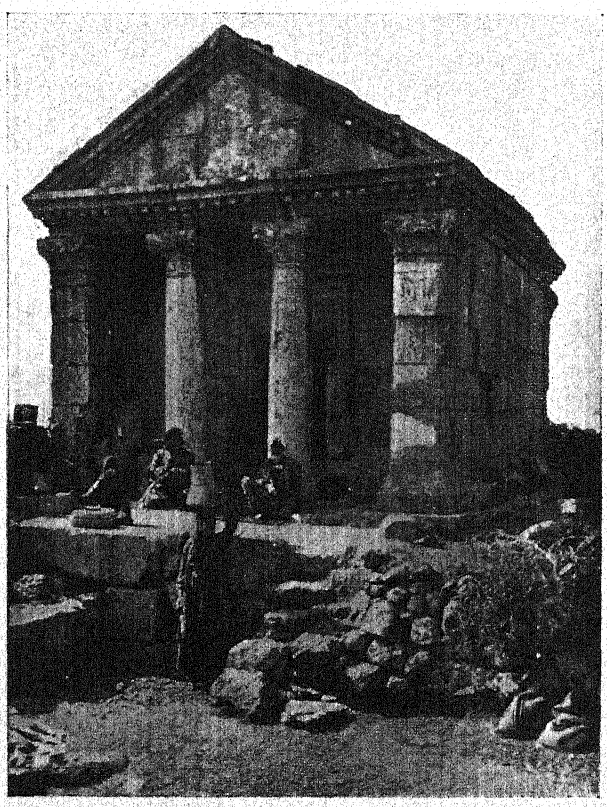


Fig. 804. — Tomb of Dschel Geval. Syria.

Roman portraits found in Egypt.

Fig. 805. — Relief of Cyrene and Libya. *(British Museum.)*

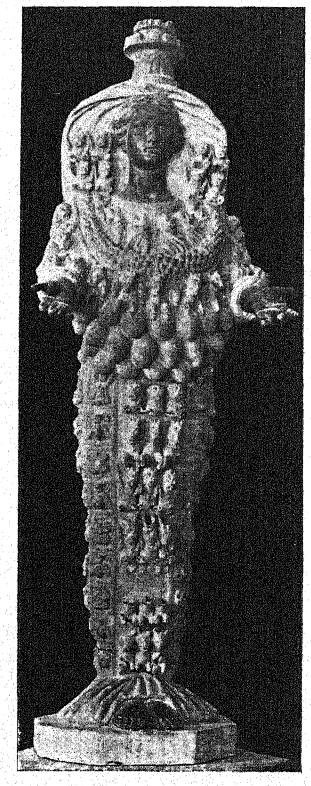


Fig. 806. — Diana of Ephesus.

sometimes represented in sculptural groups of great beauty (fig. 808). Such a group was usually set at the rear of the subterranean chamber in which they performed the mysterious rites of this Persian cult, modified to suit the Hellenistic and Roman mentality.

While in the provinces new ideas were unfolding which invaded the capital itself, the official art of the Empire pursued its course from the time of Septimus Severus down to that of Constantine. The former constructed a great building at the foot of the Palatine called the Septizonium. This was a Nymphaeum or fountain and was not torn down until the sixteenth century. It consisted of a colossal superimposition of arches and colonnades and was the first great structure to confront the traveller arriving at Rome from Ostia. The countrymen of Septimus Severus would, therefore, lose little time in gaining an exalted idea of the great African Emperor.

We have both sketches and written descriptions of the Septizonium, so we know that it was simply constructed and had little sculpture about it. It owed its importance chiefly to its great monumental façade. Two arches built in the reign of this Emperor are still to be seen at Rome. One is in the Forum and commemorates the tenth anniversary of his accession to the throne and his victories in Asia. It is elaborately carved, but the reliefs are so confused that it is

Fig. 807. — Winged Minerva. Ostia.

difficult to believe that it dates from the first years of the third century, though such, indeed, is the fact. Equally lacking in merit are the reliefs of the so-called Arcus Argentariorum, or "arch of the silversmiths", in the Forum Boarium, which was erected in honor of Septimus Severus by the money-changers of Rome (fig. 809). The pilasters and architrave are decorated with a cold acanthus-leaf pattern and only the reliefs show any life at all. One of these represents the Emperor and his wife Julia Domna, the former dressed in his priestly robes and about to make a sacrifice (fig. 810). The sculptural technique of this arch is unfortunate; Roman art again becomes harsh and is overloaded, resorting only to profuse ornamentation and extreme realism in its efforts to produce an effect.

In but one respect did architecture continue to progress at Rome, and here it showed boldness at least if not originality. This was in the construction of enormous vaults. The remains of the baths built by Caracalla, the successor of Septimus Severus, still stand at the foot of the Caelian Hill, one of the greatest ruins in the entire Roman world. The naked skeleton of this structure, stripped of its columns and marble covering, displays the remains of the mighty vaults which roofed the ingenious arrangement of circular and polygonal halls composing the baths. In the centre was the great hall containing the *piscina,* or plunge. Beyond was the *tepidarium,* or hot room, with its heated floor, and another circular apartment with a dome (figs. 811 and 812). Behind this portion of the building was a great gymnasium surrounded by a colonnade and two libraries with their shelves and niches and the pedestal for the statue of the Emperor.

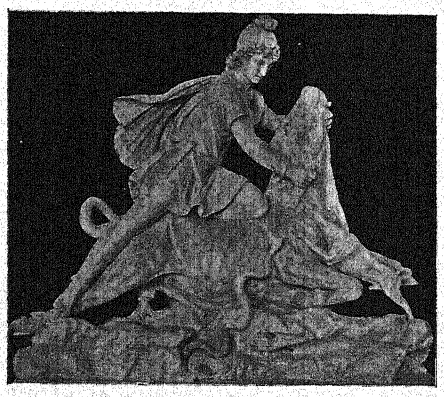


Fig. 808. — Mithras sacrificing a bull. *(Vatican Museum.)*

Less ambitious but constructed on the same plan a century later were the Baths of Diocletian, which lay between the Esquiline and the Quirinal on some of the higher ground of the city. The debris was cleared away from these ruins in 1912 and we now see the colossal vaults which resemble those of the Baths of Caracalla. But here we find decorative features which are believed to have been brought from Syria. There isa

Figs. 809 and 810. — General view and detail of the Arcus Argentariorum. ROME.

frieze of small blind arches and a decorative zone of columns resting upon brackets. In the floor are openings with curved walls, a favorite device of the Byzantine architects in later times.

Although many of these decorative features recall the Orient, Rome still held her own in the great vaults for which she needed no foreign architects. In the so-called Basilica of Constantine, which was really constructed by Maxentius in a corner of the Forum, we see all the creative power of the architects of Rome. Its arrangement is most original, very different from the plan of the traditional basilica, for it consists of a great central hall flanked by three large recesses on either side. The central hall was covered by three intersecting vaults, and the recesses, by barrel-vaults constructed at right angles to the main hall (figs. 813 and 814). Here the small blind arches and columns resting upon brackets are used to decorate the apses.

Diocletian's Palace at Spalato, Dalmatia, on the other hand, is purely an Oriental structure. Much of it has been preserved by being enclosed by the walls and buildings of the little city that grew up on its ruins. The mausoleum of the Emperor is now the cathedral, and both the gates and great sections of the walls remain in an excellent state of preservation. This structure was more than the palace of an emperor; it was a fortress as well. Its rectangular enclosure was flanked with towers and a small city was built within its walls not unlike a frontier military station with two streets intersecting at right angles (fig. 815). On the side facing the sea it had less of a military aspect, for it lay close to the

Fig. 811. — Baths of Caracalla. ROME.

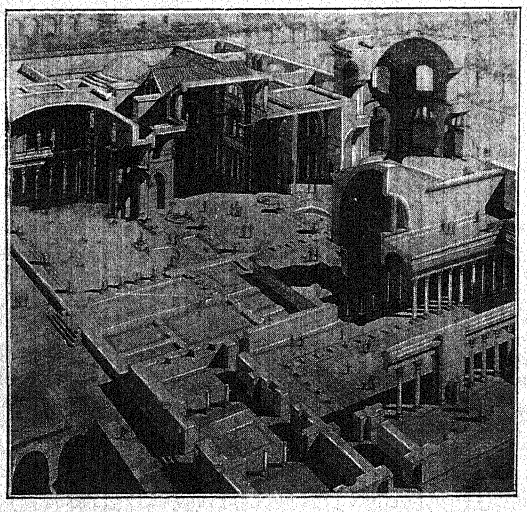


Fig. 812. — Baths of Caracalla.
Restoration of their structure.

water. This palace gives us some conception of the constant necessity for defense during the later years of the Empire, when the grim fear of a barbarian invasion was ever present. The great structure was surely planned by a Syrian architect, and it probably resembled some fortified palace at Antioch. We know from the descriptions of the palace of Constantine at Byzantium that it was of the same type.

At Spalato the blind arches form cornices, a purely Oriental feature, and

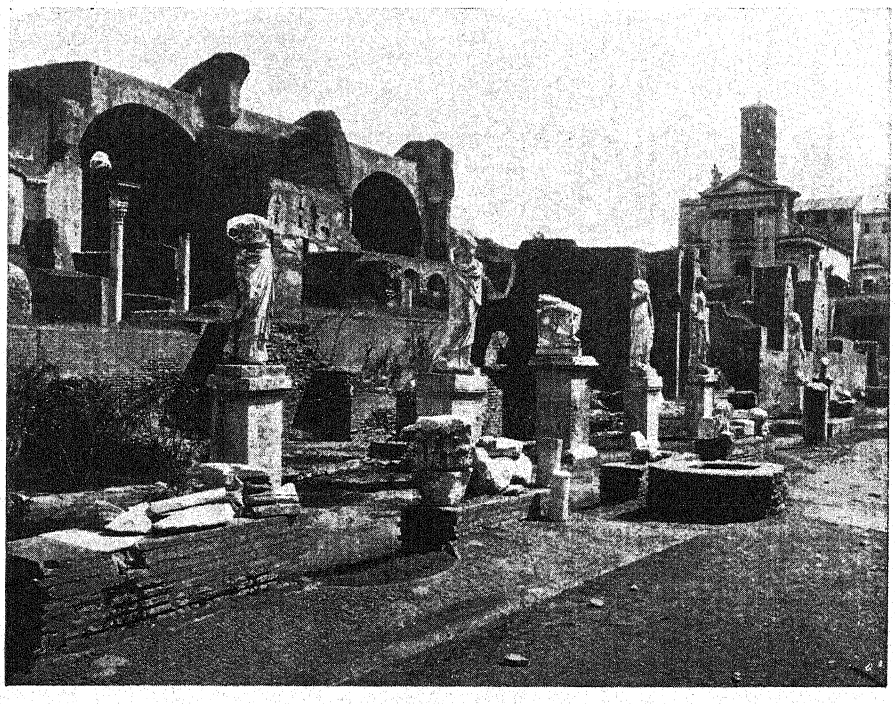


Fig. 813. — House of the Vestals with the Basilica of Maxentius in the background. Rome.

here, too, we see the great spiny acanthus leaves that were later one of the decorative elements of Byzantine art. In the vestibule of the Imperial residence, the architrave is bent over an arched head in order to give greater height to a colonnaded passageway, as in the propylaea at Damascus (fig. 816)

We should not lose sight of the significance of this Imperial palace at Spalato. Separated from Rome only by the breadth of Italy and the narrow Adriatic, it is difficult to see in it the work of the Imperial architects of the Western Empire. We should rather

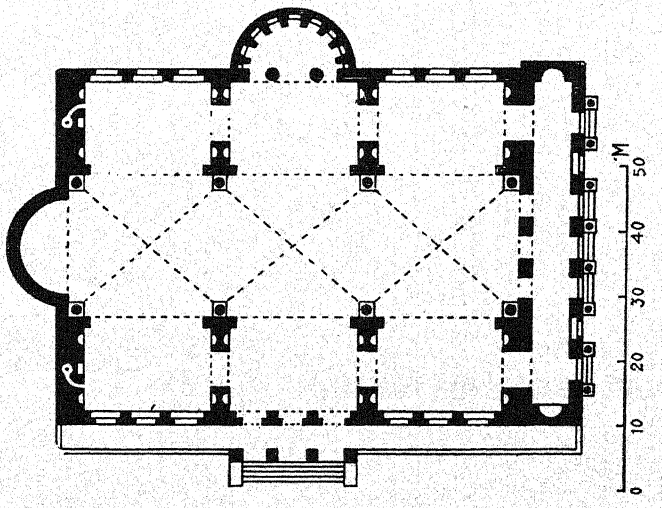


Fig. 814. — Plan of the Basilica of Maxentius. Rome.

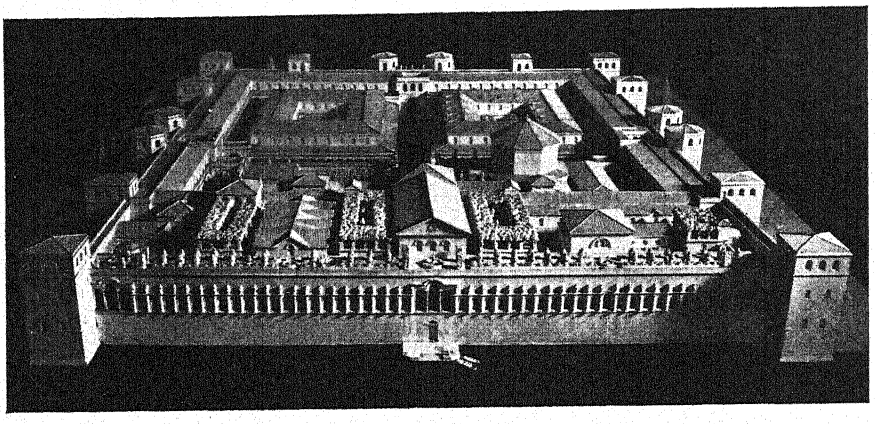


Fig. 815. — Restoration of the Palace of Diocletian at Spalato. DALMATIA.

expect to find such a structure in Syria. Indeed, we are forced to the conclusion that outside of the great engineering works and the vaulted roof, Roman architects of the early fourth century found it difficult to retain their own artistic traditions. Perhaps the most important monument of the period of Roman decadence is the famous Arch of Constantine, erected to commemorate his victory over Maxentius in 313 A.D. Its attic bears the following inscription: "To the Emperor and Caesar, Constantine the Great, the Pius and the Fortunate, who, by the inspiration of God *(instinctu divinitatis)*, the greatness of his spirit and the valor of his army, liberated the State from the tyrant and his faction, the Senate and People of Rome dedicated this arch of triumph." The Arch of Constantine possesses a certain elegance of proportion (fig. 817), although it is merely a repetition of the traditional type with three gateways, the largest in the centre

Fig. 816. — The Mausoleum of Diocletian and the vestibule of the Imperial residence in the palace at Spalato.

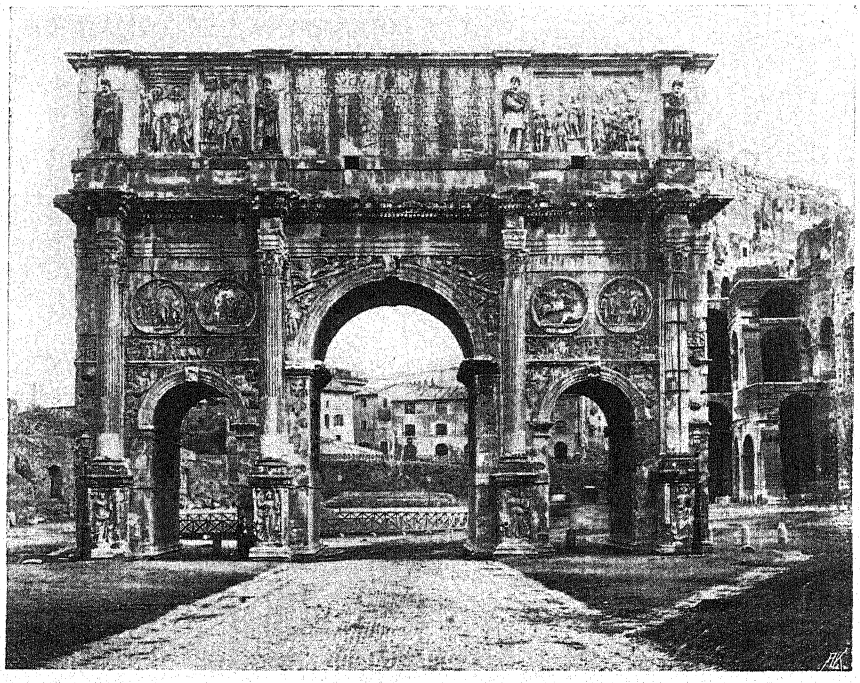


Fig. 817. — Arch of Constantine. ROME.

and the others on either side with reliefs above the arches. But these reliefs, as well as those of the attic, were taken from older triumphal arches dating from the time of the Antonines. There are a number of rectangular reliefs which commemorate events of the reign of Marcus Aurelius and the Flavian medallions mentioned in the last chapter (figs. 711 and 712). It is true that the Emperor issued a decree inviting to Rome the architects and sculptors of the provinces and granting them special privileges, but the fact that he was obliged to despoil the monuments of his predecessors in order to suitably adorn his own arch of triumph is an ironical commentary on this edict.

Other reliefs on the Arch of Constantine are contemporary with the arch itself and these are decadent in the extreme. In figure 818 we see the Emperor himself on the rostrum of the Forum, surrounded by his generals and haranguing the multitude. The various figures are stiffly outlined against the background to separate one from another. There is not that flexible application of figures to a plane which gives an effect of perspective. Still more deplorable are the Victory figures on the bases of the columns. They are lifeless mannikins, grotesquely carved, who bear military trophies. At their feet are the traditional figures of barbarian prisoners (figs. 819 and 820).

Other important sculptural evidence exists of the decadence of art during the reign of Constantine. Noteworthy are the porphyry sarcophagi of St. Costanza and St. Helena, discovered in the mausoleum of the latter and now in the Vatican (fig. 821). On one of these we see Roman soldiers fighting the barba

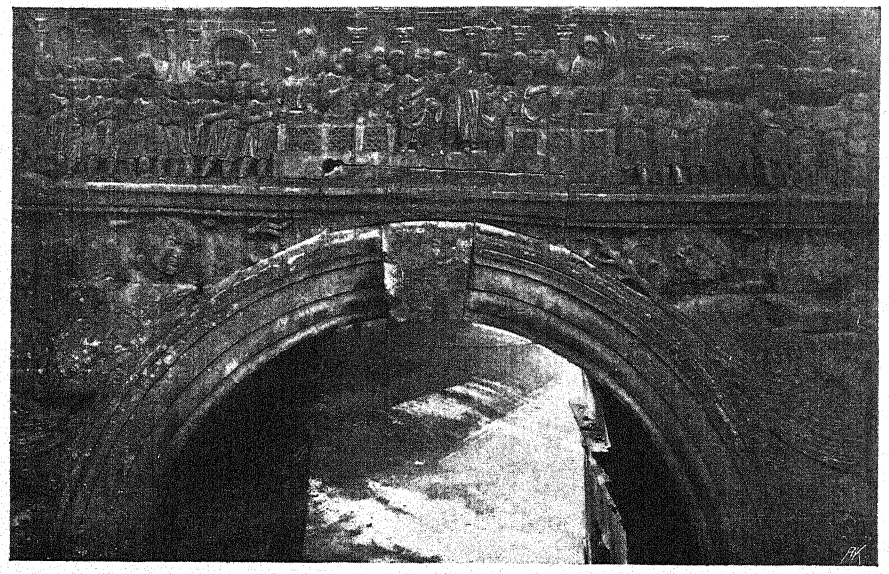


Fig. 818.—Reliefs on the Arch of Constantine. ROME.

rians; the figures are stiffly outlined and look as though they were cemented to the background. In the other, children are seen plucking grapes and treading upon them, a theme employed by the early Christians in the catacombs. The arrangement of the laurel festoons is interesting; instead of carving the leaves in a natural manner as in the handsome garlands of the *Ara Pacis* and Trajan's Forum, they are compressed like a metal cylinder bending from its own weight. The natural flexibility of a garland of leaves is entirely lacking.

These tombs of St. Costanza and St. Helena might also be considered a proof of the influence of Oriental art upon Rome during Constantine's reign. They are carved from red porphyry, which leads us to believe that they may have been the work of Oriental or Egyptian artists. That both Christian and pagan sarcophagi were brought to Rome from Asia has been confirmed by the kind of marble used and the introduction into Rome of many themes popular in the Orient. Both at Rome and throughout the Empire we find sarcophagi ornamented with spiny acanthus leaves which must have come from Syria. Some are Christian while others are still pagan like the one in the Bardo Museum. In the centre of the latter we see the old subject of the three Graces, and in the four lateral niches are figures of the four seasons, one of them the Alexandrian type which the Christians later adopted as the Good Shepherd (fig. 822).

It is true that we have referred to the Roman art of this period as decadent, characterizing it as rude, grotesque and lacking in expression, at times displaying an ignorance of the most elementary natural forms. Nevertheless, thanks to Riegl's efforts, we now begin to understand the true value of these decadent decorative forms and their importance in the world of the spirit. These late Roman sculptors, when they carved the Victory figures on the Arch of Constantine (figs. 819 and 820), may not have had the knowledge necessary to repro-

Figs. 819 and 820. — Victory figures on the socles of the Arch of Constantine. ROME.

duce the classical type of the flying Victory, but they did put into their rather disjointed interpretation something of that new spiritual force which we see in the Romanesque sculptures of the Middle Ages.

The same is true of the decorative plant forms. The festoons and other ornamental designs of the fourth century possess neither the calm beauty of Augustan art nor the conscious strength of the art of Trajan's century. They lack life. But in these conventionalized forms crowded together upon the plane behind them, we see the beginnings of a new style filled with mighty potentialities, the results of which were to be far-reaching in their scope. Nevertheless, comparing them as we have with the classical models and the forms that grew directly out of the latter, they appear to be nothing more than the decadent manifestations of a great art, and as such they have been regarded until very recently.

The only evidence we have of any artistic feeling among the sculptors of the fourth century is in their portraits.

A number of statues of the later Emperors have come down to us which possess a real spiritual value. The personality of each subject is expressed, perhaps, with more intensity than we find in the earlier Hellenistic portraits, which were somewhat idealized. One of these statues, discovered near the

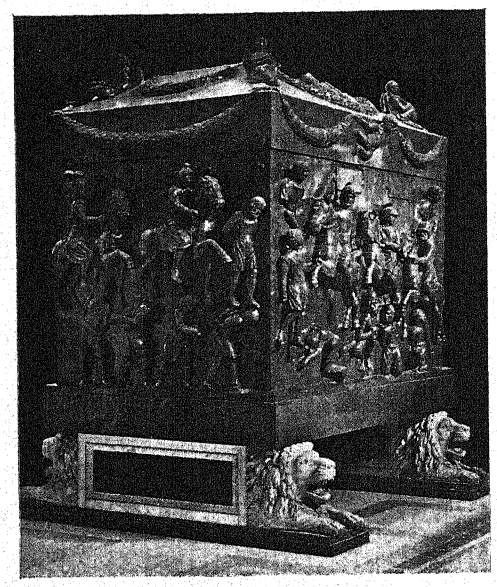


Fig. 821. — Sarcophagus of St. Costanza.
(Vatican Museum.)

Lateran, is now in the Museum of New York (fig. 823). The torso is like a bronze cuirass, and the attitude of the *Imperator* is somewhat ridiculous, for the statue is a stiff-kneed imitation of the Augustus from Prima Porta. Nevertheless, the head of this rough leader is full of life. We see in him one of those later Emperors who were set up and overthrown by the legionaries. A cameo from the Barberini collection shows the face of Maximinus which somewhat resembles that of Hercules, his favorite hero (fig. 824). The portrait busts of this period grow larger and larger until they take in almost half of the figure; a full toga is folded across the breast (figs. 825 and 826). Some wear the mantle of a priest, and most of them appear with cropped hair which is represented only by raising the skull. In the reign of Constantine, both Emperor and private citizens alike wore their hair longer. It was not carefully arranged, but fell over the forehead in a heavy curve (fig. 827). Portions of the gigantic statue of Constantine erected at Rome are still preserved in the Museum of the Capitol. This figure was more than thirty feet high and probably represented the Emperor bearing a globe in one hand and a scepter in the other, or perhaps a cross. Another portrait statue of Constantine has been preserved in the portico of the Lateran, the first palace of the Popes, and presented to them by this Emperor.

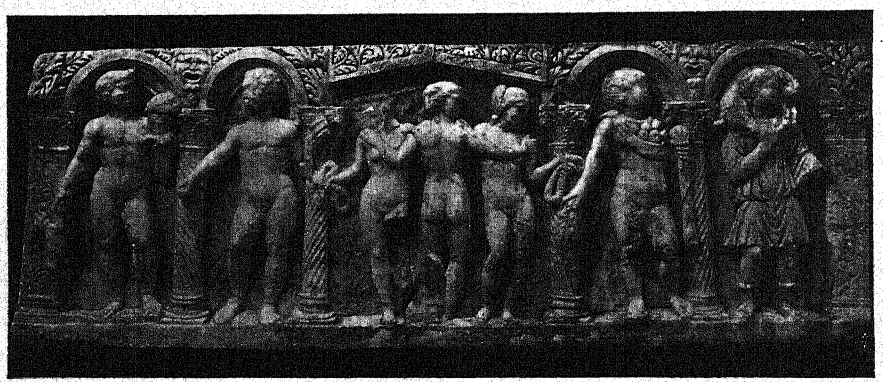


Fig. 822. — Sarcophagus with the Three Graces and Four Seasons.
(Museum of the Bardo.) TUNIS.

Still another in miniature is seen on the sarcophagus of his mother, St. Helena, so the face and figure of the first Christian Emperor are well known to us. The same is true of Julian the Apostate, Theodosius and the other Emperors of the fourth century. Besides Imperial portraits, others have come down to us of ladies of rank like St. Helena and even persons of lesser importance, such as consuls and magistrates. These have been identified by means of cameos and medallions bearing their names.

We have already mentioned the painted portraits of Egypt. Others in the catacombs of Rome show us that the fourth century painters were still able to produce interesting work. Instead of monumental and decorative painting, we now find only mosaics. These not only adorn the floors, but begin to cover walls and domes as well. We note the same phenomenon in Byzantine art also, for here frescoes are hardly ever used in the decoration of the upper portion of a building, but mosaics are preferred instead. From the Rome of Constantine's time we have the mosaics of the dome of the mausoleum of St. Costanza and St. Helena, representing little Cupids gathering and treading upon grapes. Groups of Nereids and Tritons decorated the baths, and scenes from myths of Venus and Bacchus were favorite themes for the decoration of private houses, as we see from the mosaics of the Museum of the Bardo, discovered in 1905 near the amphitheatre of El Djem (figure 828). Africa and Spain were especially rich in mosaic work. Here we find scenes from colonial life, hunting parties and other diversions, especially the games of the circus of which they were so fond. A mosaic found in Barcelona shows a number of chariots sweeping down the circus track in a thrilling race. Another in the Museum of the Bardo pictures the end of the race with the winning charioteer returning in triumph. He

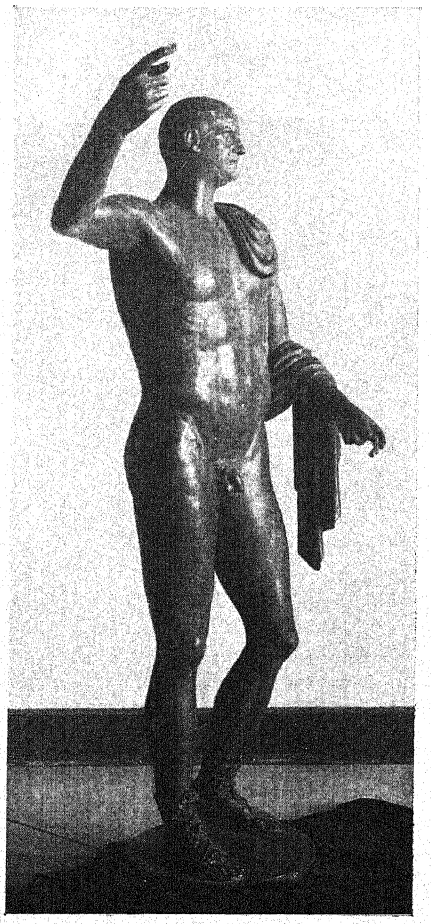


Fig. 823.—Bronze portrait of Trebonianus Gallus, Roman Emperor. *(New York.)*

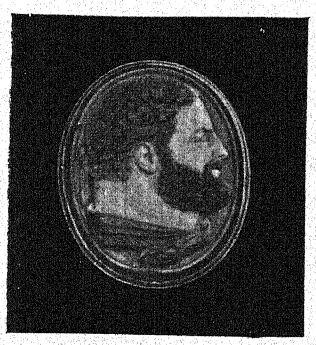
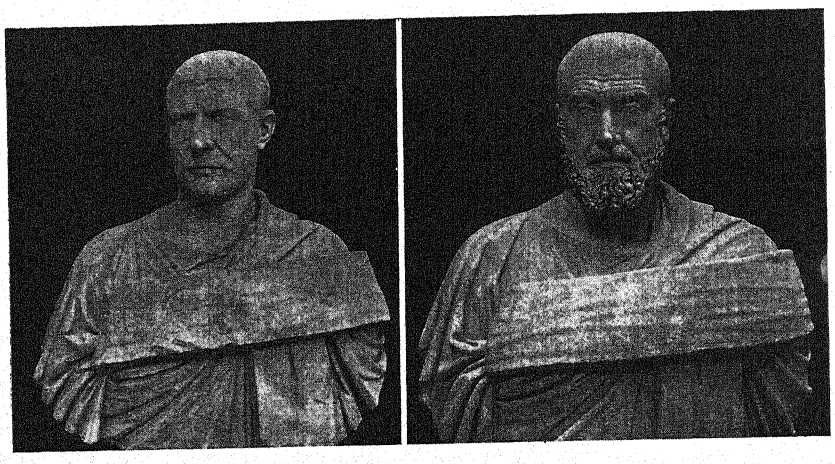


Fig. 824.—Cameo of Maximinus.



Figs. 825 and 826. — Portraits of Philip the Arab and Pupenius. *(Museum delle Terme.)*

bears in his hand the victor's wreath, and above him is written: "Eros! All for thee." The name of each horse is written above it, while the stables appear in the background.

By the end of the fourth century, mosaic has become the principal element of ornamentation. It covers not only the floors, but also walls and vaults, and in addition to the cubes of marble, we now find glass entering into its composition. Mosaic is essentially a Hellenistic art, or perhaps Oriental. Indeed, it is a surprise to find it also in pre-Columbian America. The ancient Egyptians made little use of it and the floors of the palaces of the Pharaohs were of painted stucco. But in Alexandria and Hellenistic Egypt mosaic came into fashion like everything else that was Greek. Some of the Roman mosaics indicate an Egyptian derivation with their landscapes representing the Nile and accompanied by crocodiles and other African fauna. The other provinces of the Empire also furnished Rome with subject-matter, particularly the Orient, and Rome in turn served as a center of distribution to the Occidental provinces. Her mosaics and sarcophagi enlarged the repertory of ideas and forms in Central and Western Europe.

Fig. 827. — Portrait head of Constantine. *(Museum of the Capitol.)*

In recent years the historian has begun to note that transformation of ethics and religion which took place in the Roman Empire during the fourth century A. D. and see that already men's minds were turning toward the thoughts and ideals of the Middle Ages. Indeed, it is hardly an exaggeration to say that it was this great melting-pot of the later Roman Empire that contributed

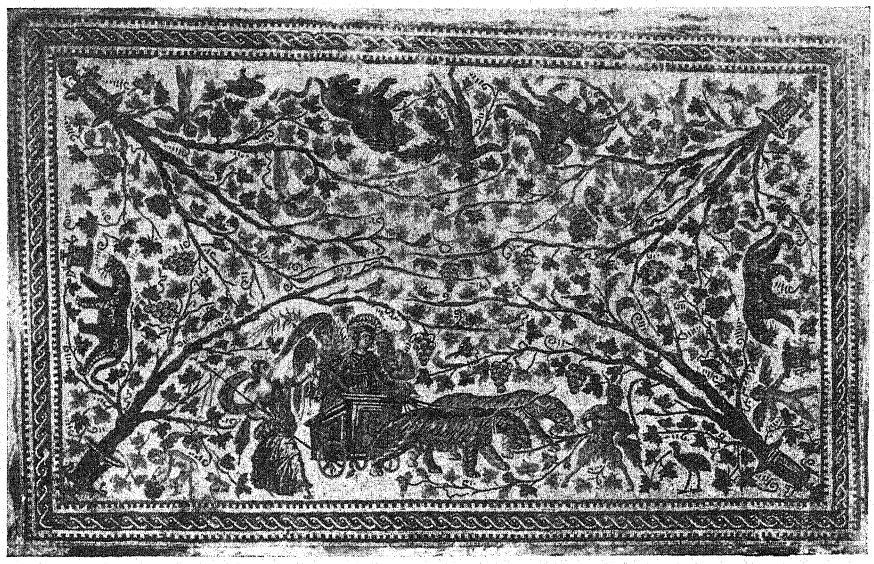


Fig. 828. — Mosaic representing the triumph of Bacchus.

largely to the transformation of the Western European world and led it to turn away from those things which we consider purely classical. Even the old myths were now interpreted in such a manner as to show an esoteric significance. We have already noted artistic representations with allusions to the life beyond the grave, but still in the classical form, as on the monument at Igel. From the beginning of the third century the favorite themes are no longer the stories of the great gods, nor even that of Hercules, but rather problems of the soul, concealed in the myths of Cupid and Psyche, Orpheus and Eurydice, the Rape of Proserpina, Endymion and the like. These are all symbolic of that desire for another and a more spiritual life, the life which in the Middle Ages was considered the only true and eternal one.

Fig. 829. — Charioteer leaving the circus.
(Mosaic in the Museum of the Bardo.) TUNIS.

It is very evident that the Greek Mys-

teries had already done much to arouse such a feeling, and it is indeed possible that the Mysteries themselves were a survival of the pre-Hellenic religion. But in this last period of the Roman Empire not only did they continue to represent the classical Mysteries, but they also interpreted the familiar themes of pagan mythology in a new and more spiritual sense.

The survival of the various subjects and art-forms of the classical styles in Christian art will be treated fully in the second volume of this work.

Summary. — The Roman Empire had spread its long paved routes of communication like a net over its various provinces. Bridges, acqueducts and city walls dating from Roman times are still to be seen in considerable numbers. The cities were usually laid out about two main streets which intersected at right angles. At this intersection was the Forum with its temple and triumphal arches. Here, too, was the Basilica. The military stations were laid out like a Roman city, only on a smaller scale, and the Praetorium took the place of the Forum. In these encampments we find an art, peculiar to the legionaries, which was more or less the same on the various frontiers of the Empire, and was imitated by the Romanized inhabitants of the provinces. The artists of the legions in turn were influenced by the different peoples among whom they lived. The artistic traditions of Egypt and the Orient continued to develop during the Roman period. Baalbec and Palmyra present, in their great temples, Roman works in which Semitic elements are found. Oriental influences exerted upon the great vaulted structures at Rome begin to be noticed in the Baths of Diocletian. The palace of Diocletian at Spalato is really Oriental, although its arrangement resembles that of a Roman military station. The decadence of art in Rome itself is very evident in the Arch of Constantine, in which its builders even made use of reliefs robbed from older structures. Only in its portraiture does Roman art continue to possess any interest for us. Painting is substituted by mosaics, more and more of which are constantly being discovered throughout the vast territory comprised by the Roman Empire.

Bibliography. — A. MAU: *Pompei*, 1905. — D. VAGLIERI: *Ostia*, 1912. — P. GSELL: *Les monuments romains de l'Algérie*, 1904. — P. GLAUKER: *Catalogue du Musée du Barde*, 1903. — *L'archéologie de la Tunisie*, 1896. — R. LANCIANI: *The Ruins and Excavations of the Ancient Rome*, 1897. — H. MARUCCHI: *The Roman Forum and the Palatine*, 1908. — B. SCHRADER: *Die römische Campagna*, 1910. — F. STUDNITZKA: *Trophaeum Traiani*, 1903. — E. ESPERANDIEU: *Les bas-reliefs de la Gaule romaine*, 1908. — R. E. BRUNNOW and A. VON DOMASZEWSKI: *Die Provincia Arabia*, 1905. — F. CUMONT: *Les religions orientales dans le Paganisme romain*, 1907. — *Les textes et monuments figurés relatifs au culte de Mitra*, 1891. — ALOIS RIEGL: *Stilfragen*, 1893. — *Die spätrömische Kunst-Industrie*, 1901. — H. B. WALTERS: *The Art of the Romans*, 1911.

Fig. 830. — Medusa. Roman mosaic. TARRAGONA.

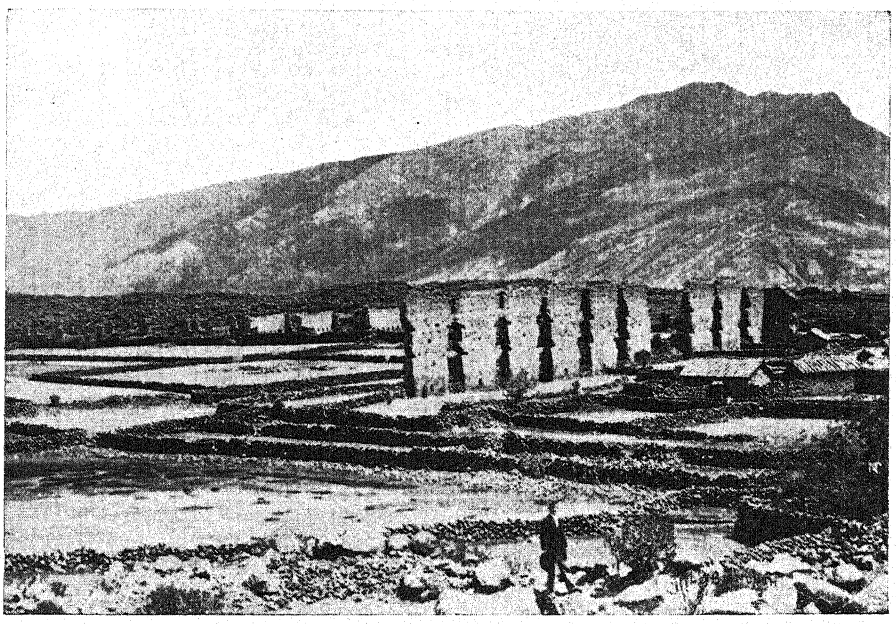


Fig. 831. — Ruins of the temple of the Inca. *Viracocha*. Cuzco (Peru).

CHAPTER XXI

ABORIGINAL AMERICAN ART. — PRESENT STATE OF OUR KNOWLEDGE.
THE ARCHITECTURE OF MEXICO AND YUCATAN. — PERU. — SCULPTURE AND CERAMICS.

In America the ethnologists and archaeologists encounter difficulties far greater than those offered by any other continent. In the Far East and the Islands of the Pacific the material for study belongs to peoples who, in spite of contact with Western civilization, have preserved their own customs and traditions to an extent which permits some investigations of their origin. But the more cultured tribes of American Indians were converted to Christianity so suddenly that they are now absolutely ignorant of the history of their ancestors. Only in a few of their superstitions which they hide from the European do they preserve any traces of their ancient myths and religious beliefs.

The study of American antiquities is still in a period of formation. European indifference is largely due to two reasons: the scarcity of the material and its exotic character. The culture and art of the more advanced peoples of America are apt to be repellent to the minds of many of us, educated as we are to the traditions and forms of classical art (fig. 832).

Nevertheless, it is the hope of the writer to be able to present some of the monuments and other works of art in such a manner as to awaken an interest in the remarkable esthetic capacity of some of the ancient peoples of America.

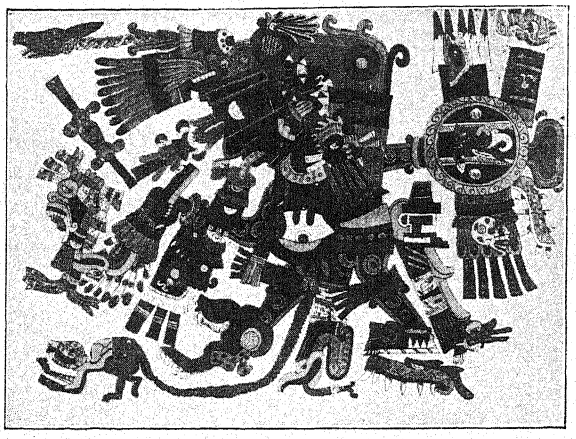


Fig. 832. — The god presiding over the year.
(Mexican picture manuscript.)

We will first take up the material we have for study.

When the European conquerors landed on their shores, only two peoples of all the tribes inhabiting the two continents possessed a system of writing. These were the Aztecs and similar peoples of the highlands of Mexico and the Mayas of Yucatan and Guatemala (fig. 833). A number of the picture-manuscripts of Mexico and Central America have been preserved in the great European libraries. They are written upon deer-skin or a preparation of bark folded in the manner of a screen, and their pages are covered with pictures and hieroglyphic signs (fig. 834). Often there is a small picture in the centre of the page with hieroglyphics along the edges. The same hieroglyphs are found on the carved reliefs, where we see figures accompanied by inscriptions (fig. 858). The best known of these relief carvings is the Palenque Cross. Here two priests stand on either side of a cruciform symbol, perhaps a conventionalized tree, and to the right and left are broad bands of hieroglyphics. The symbol in the centre is often encountered in the picture-manuscripts and its similarity to the Christian cross has given rise to numerous hypotheses and conjectures (fig. 835). We now begin to have some idea of the manner in which these symbols developed; at first they were simply pictures of the object signified, but as time went on they became more and more conventionalized, and finally they were grouped like the Egyptian hieroglyphics so as to express combinations of syllables. Certain combinations of bars and round dots are simply numerals, the dots standing for units and the bar for fives. The system of numeration used in Central America is well known and from the accounts of the Spanish writers who accompanied the conquerors we are familiar with the calendar systems of these peoples which are based on weeks of thirteen days and months of twenty.

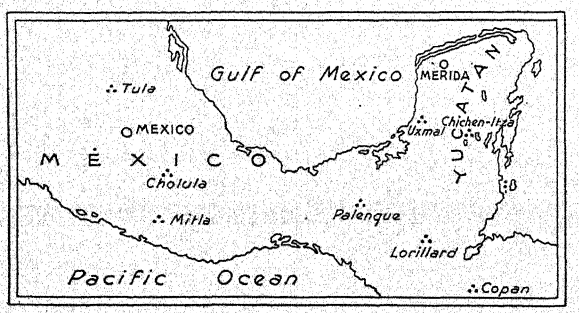


Fig. 833. — Archaeological map of Mexico and Yucatan.

But we have no Rossetta stone with which to decipher these American

hieroglyphics, and scientists have been obliged to fall back on the accounts of the early chroniclers and historians of New Spain such as Cogolludo, Landa, Torquemada, Durán and, most important of all, Sahagún. In the manuscript of the last, now preserved in the Academy of History at Madrid, we find drawings and paintings of the numerous gods of the Mexican Pantheon with all their attributes, which enable us to identify many of the strange figures found in the old manuscripts and on the relief carvings. A large number of the Aztec hieroglyphs can now be read. Sahagún wrote down the information he received in the Aztec language and made a Spanish version as well. He describes the bloody rites (fig. 836) and the prayers and incantations with which the Mexicans conciliated their gods; indeed, the latter are not without a certain eloquence and poetic spirit.

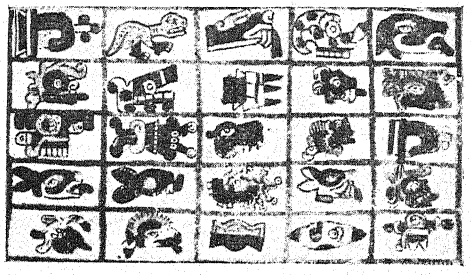


Fig. 834. — Mexican hieroglyphics. Day-signs.

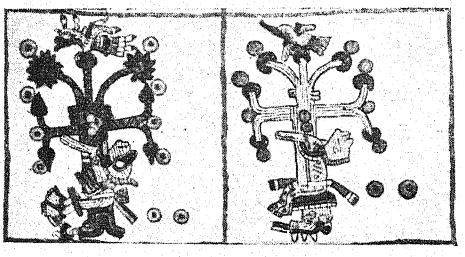


Fig. 835. — Cruciform symbols from the Mexican picture-manuscripts.

Unfortunately, the descriptions of the country and its monuments are only too brief and do not compensate for the acts of vandalism and the deliberate destruction carried out by the conquerors. It should not be forgotten that Pizarro was illiterate. The conqueror of Yucatan had but 400 soldiers at his command, and naturally his reports to the King of Spain are of little ethnological value. He only states "that the country was filled with large and *new* cities." Even less could many of the missionaries understand the myths and religions of the peoples of America; not only did they differ in their content from those of the Old World, but it was almost impossible for the European to understand the mentality of the Indian. To the latter everything is alive. It has a shadow or spirit, can hear and see; a tree can transform itself in a bird, a stone can turn into a man, so there may be said to be as many spirits in the world as there are objects.

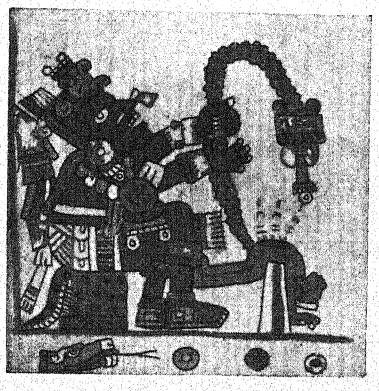
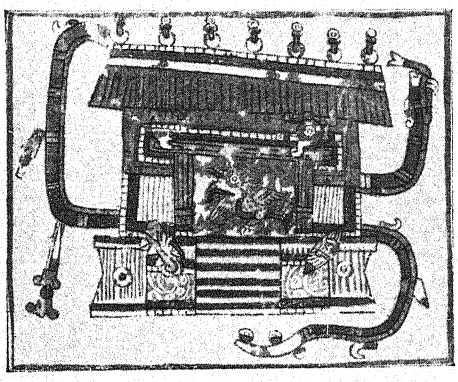
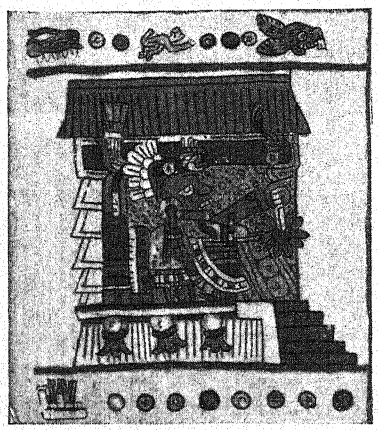


Fig. 836. — A human sacrifice. *(Mexican picture-manuscript.)*

The most powerful of their deities were the gods of the rising sun, of the constellations of the heavens, of rain and of war. In their honor were erected the monumental temples of Mexico called *teocallis*.





Figs. 837 and 838.—Temples from Mexican picture-manuscripts.

These temples were the dwelling-places of the gods and in the manuscripts we see them seated in their houses, which are very similar to the temples which have been preserved (figs. 837 and 838).

Pre-Columbian buildings are still to be found only in Mexico, Central America, Peru, Bolivia and the Southwest of the United States. The earlier descriptions of these structures are usually unsatisfactory and it is only in the last eighty years that American antiquities have begun to be studied in a scientific spirit. One of the first investigators was Lord Kingsborough, who sought to find in the American Indians the lost ten tribes of Israel. In 1843 he published a magnificent book entitled *Antiquities of Mexico*. This had been preceded by the works of Stephens and Dupaix and was followed by the report of Charnay's expedition and the works of Holmes and Chavero. To these should be added the publications of the National Museum of Mexico and the Bureau of Ethnology at Washington. The last named has published much, not only concerning the early inhabitants of the United States, but also of the more highly cultured nations of Mexico, Central America and Peru. In 1904 the Bureau of Ethnology published a volume of translations of a number of European monographs on the antiquities of Mexico and Central America. Not only has the Bureau of Ethnology issued its valuable Bulletins covering the subject, but it has given an impetus to the work of American scholars and invited European specialists to pursue investigations in this field. Noteworthy is the monograph of Professor Seler of the Museum of Berlin on the palaces of Mitla, published by the Bureau. To Germany we are indebted for Seler's *Peruanische Altertümer* and *Gesammelte Abhandlungen;* to Great Britain, for Maudslay's monumental work, *Biologia-Centrali-Americana;* to the Americans, for Morley's *Inscriptions of Copan* and Spinden's *Maya Art,* to say nothing of the other magnificent Memoirs of the Peabody Museum. Important explorations are now being carried on by the Carnegie Institution in Guatemala, Honduras and Yucatan, and Sr. Gamio's great work on Teotihuacan bears witness to the work of the Mexican Government. Municipal excavations in the City of Mexico have uncovered the remains of one of the important teocallis of Montezuma's capital.

The result of all these investigations has been to prove a certain cultural unity common to the peoples of Mexico and Central America and, to a certain extent, of the Peruvians as well. In the ruins of Teotihuacan, just outside the City of Mexico, Lehman discovered deeply burried under accumulations of soil fragments of pottery coated with a brilliant enamel. Max Uhle found this art highly developed in Peru as well. Here the monuments also bear a certain similarity to those of Mexico and Yucatan.

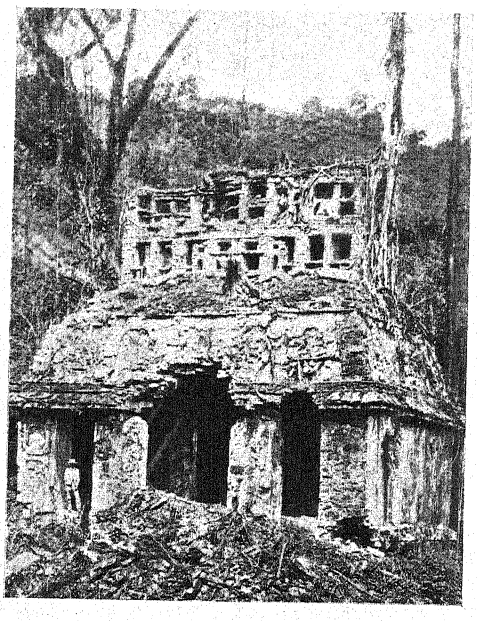


Fig. 839.—Ruins of the Sun Temple. PALENQUE.

The Spanish writers collected the traditions of the different stages of American culture. According to these, there was in Mexico first a people called Toltecs who were succeeded by Aztec invaders. In Guatemala and Yucatan lived the Mayas who differed greatly from the latter in language and appearance, but who constructed buildings in many respects similar to those of Mexico. So far it has not been possible to confirm many of the legends of these peoples, but we find many common features in the art of both. The Maya ruins lie abandoned in the tropical forests, and the Aztec cities occupied by the Spanish conquerors have been entirely replaced by buildings European in character. In Mexico City the cathedral was erected on the site of the great temple; the present Castle of Chapultepec is where the residence of the native rulers once stood; and the relief carvings of Montezuma and his ancestors on the rocks of Chapultepec were destroyed by the Spaniards in colonial times.

But in the forests of Mexico and Yucatan, far from the more populous centres, numerous ruins still remain to be explored by the archaeologist. These pre-Columbian cities were often composed of a considerable number of important buildings, today more or less in ruins, which conform to certain definite types (fig. 840). One of these consists of a pyramidal substructure surmounted by a comparatively small temple. Another type is the so-called palace, which may have contained the residence of the chief and his family together with the council halls of the tribe. There was often more than one temple in these ancient cities, for we find in some of these cities a number of temple-pyramids, ruined by the elements and the destructive action of the tropical vegetation with which they are covered. In many cases they are of colossal size; the Pyramid of the Sun in Teotihuacan is larger than the Great Pyramid of Egypt, although not so high. It is composed of adobe bricks instead of stone. The Pyramid of Cholula between Mexico City and Vera Cruz has a square base and

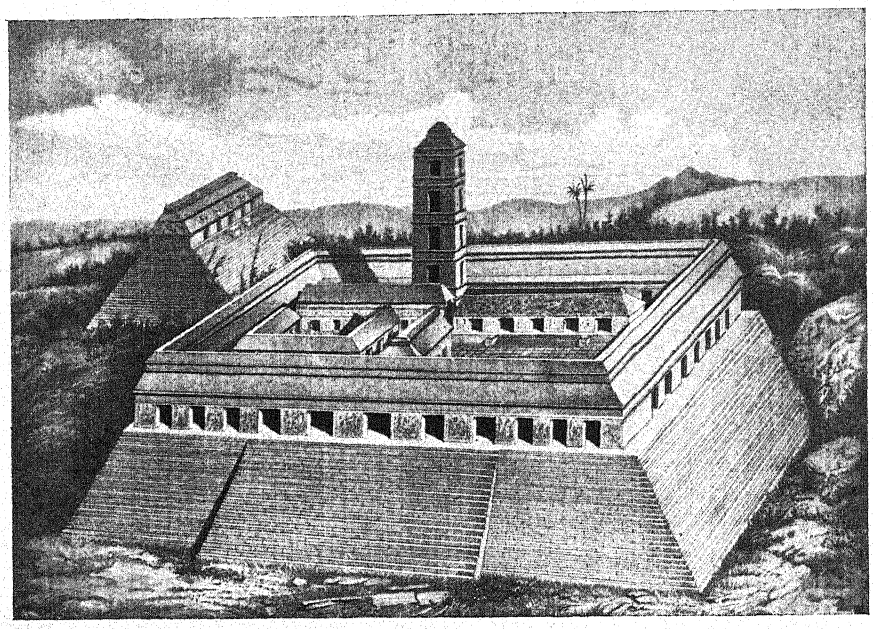


Fig. 840. — Restoration of the Palace and one of the temples at Palenque.

covers several acres of ground. Its height is about 170 feet. These pyramids were ascended by a monumental stairway on one side which led to the platform on the summit. The towering pyramid-temples of Yucatan are called *castillos,* or castles, by the Indians today, and it is possible that in times of invasion they may have been used as strongholds. Upon the summit stood the temple itself which housed the image of the god. In the highlands of Mexico it consisted of a single room with its doorway, but at Palenque we find more than one room and a number of openings on the principal façade which fronted on the stairway (fig. 839). In the latter we find the piers between the openings decorated with reliefs. In some cases the substructure was also ornamented with reliefs. An interesting example of these temples is the Temple of the Sun at Palenque, a famous Maya city which must have been of more than ordinary importance and in which we find the best existing examples of these people. The Temple of the Sun is not very large; its plan is rectangular and measures about twenty-six by thirty-six feet. It is important for the reliefs on its piers and walls (fig. 840). Especially interesting is the roof-comb which surmounts it and which is pierced by openings. On one of the temples at Uxmal

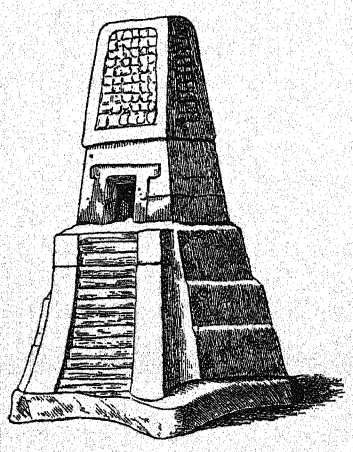


Fig. 841. — Terra-cotta model of a temple.

the roof-comb consists of a row of projections resembling the profile of a step-pyramid and the structure is called the House of the Pigeons by the Indians because of its resemblance to a row of dove-cotes.

A small terra-cotta model of a temple, found in the ruins of Yaxchilan in Guatemala, has a roof-comb. It was either purely ornamental or possessed a religious significance, for the hollow space within it does not comunicate with the rooms below (fig. 841). Sometimes there is another chamber part way down the teocalli or at its base. This apartment has a façade of its own, and is not directly connected with the shrine upon the summit of the pyramid (fig. 842). The large typical "palace" often lies facing the teocalli a little distance away. This may have housed the chief and contained the official apartments. The poorer families probably lived in palm-thatched huts of which no trace remains. There are two types of "palace." One is a pyramidal structure with a line of apartments set into the face of each section of the pyramid and opening on the terraces which extend around all four sides of the structure. A monumental stairway ascends from terrace to the top of the entire structure as at Zayi (fig. 843). The other type consists of four long narrow buildings surrounding a court in the centre, the whole set upon an enormous substructure which is also reached by a monumental stairway at the top of which is an arched passageway leading into the court. The principal buildings are frequently oriented, but are not arranged in regular squares and streets like the cities of the Old World. It all seems very irregular.

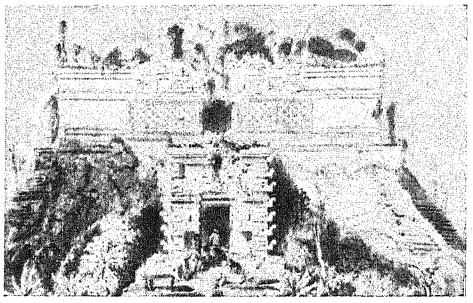


Fig. 842. — View of the Casa del Adivino. UXMAL (Yucatan).

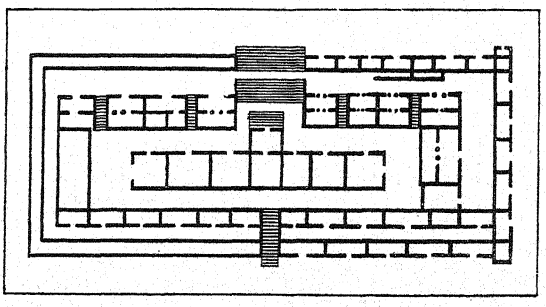


Fig. 843. — Plan of the Palace at Zayi.

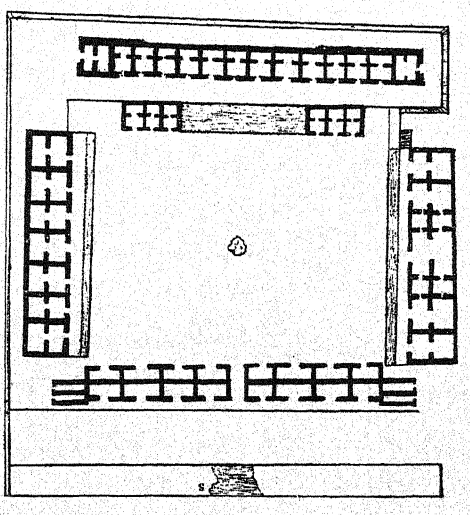


Fig. 844. — Plan of the "Nunnery." UXMAL.

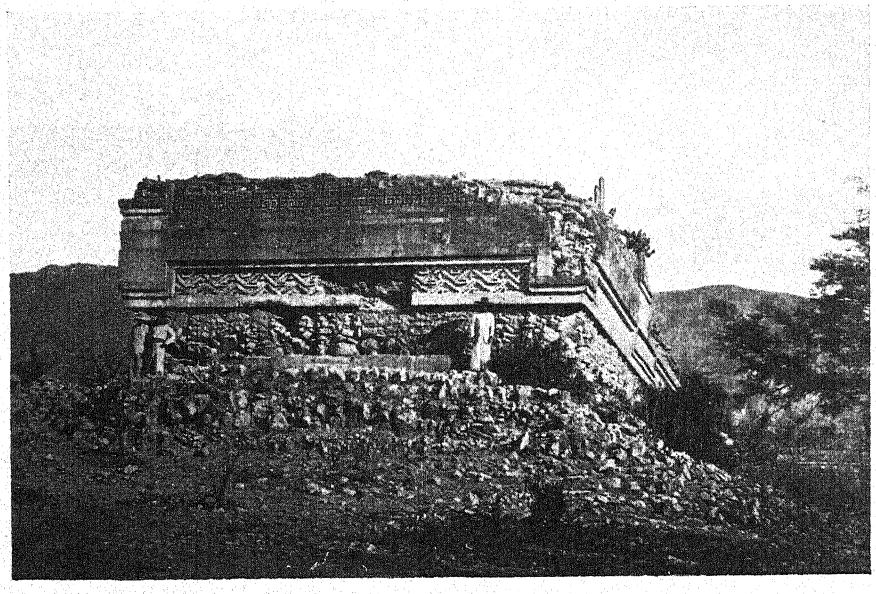


Fig. 845. — One of the buildings of the Group of the Columns. MITLA.

The second type of palace is usually a one-storied structure. Each of the four long narrow buildings enclosing the court is rectangular and contains a series of small rooms almost like cells. For this reason it is called a nunnery; indeed, there were communities of women in Mexico who cared for the temple and took part in the religious services, although the principal functions were performed by priests. Be that as it may, these structures were built of adobe and stone in Mexico and of stone and lime in the more southern Maya area, where they were covered within and without with a casing of hewn stone. This was often smooth below, and above was a zone or frieze composed of stone mosaic forming grotesque masks, serpents, imitation of lattice-work, or arranged in elaborate geometrical patterns.

There were two types of roof-construction. In the Mexican area wooden columns supported a flat roof of beams, poles and withes, all covered with a closely packed layer of adobe and coated with gypsum cement. Practically the same roof may still be seen in the dwellings of the Pueblo Indians in the Southwest of the United States. This type of roof was supported by stone columns at Mitla, where we find a combination of Mexican and Maya features. The other type of roof is found solely in the Maya area and consist of a pseudo-vault composed of triangular stones, each course projecting horizontally and held in place by the mortar of the filling until the sides have approached to within a foot or so of one another. Then a series of flat slabs or cap-stones completes the span. Consequently one half of the vault is often still standing when the other half has fallen away entirely.

The doorway was often divided by pillars into three parts, each of which was spanned by a stone or wooden lintel. Columns are sometimes monolithic

and sometimes composed of sections, or drums. Both square and cylindrical columns are found; some are plain and others are ornamented with reliefs (fig. 846). Both square and round capitals occur. We see in figure 847 the plan of one of the buildings at Mitla which is fairly characteristic of the other structures of this city.

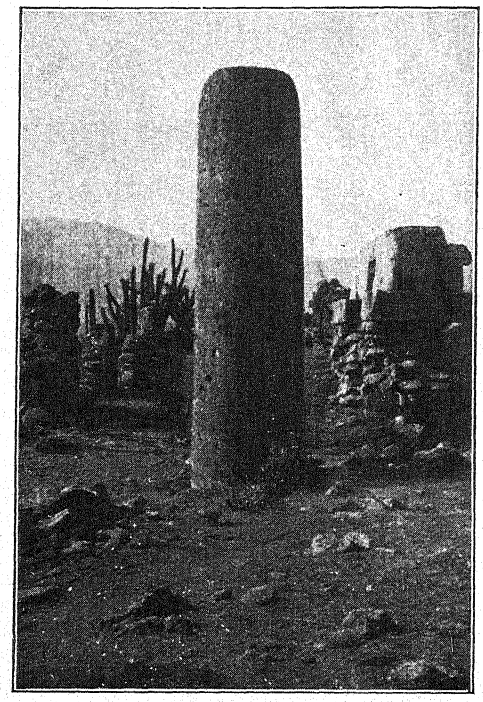


Fig. 846. — Column of one of the palaces. MITLA.

Structure A is the most important of the four surrounding the court. Behind the columned hall, which was roofed with beams, is a narrow passage leading to a small court. This court and the apartments surrounding it are richly ornamented with geometrical designs composed of stone mosaic. The other structures, B, C and D, are each composed of a single columned hall.

We find no windows in any of these buildings. The lintels of stone and wood have often cracked or decayed allowing the wall above the doorway to fall in. Lintels and door-jambs are frequently carved in relief. We see wooden lintels over the doorways of the temples of the Mexican picture-manuscripts (figs. 837 and 838).

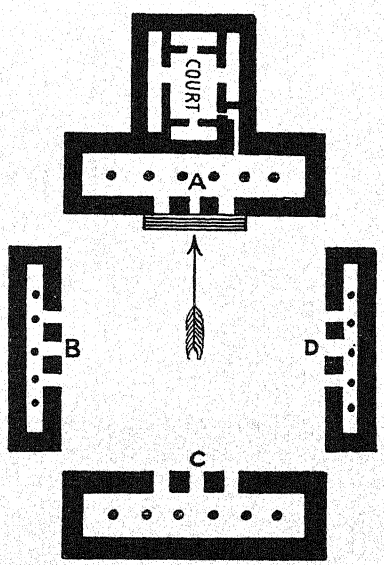


Fig. 847. — Plan of the Group of the Columns. MITLA.

The absence of windows gives the façades of these buildings a majestic air; the geometrical designs ornamenting the upper zone produce a rich effect without disturbing the monumental appearance of the entire structure. Some of these, like the House of the Governor at Uxmal, are of enormous size and are set upon a massive substructure which detaches them from the thick undergrowth of the surrounding forest (fig. 848.)

The interior is sometimes ornamented with a geometrical or hieroglyphic frieze. At Palenque we find elaborate stone panels carved in relief and set in the walls behind the altars of the temples. At Chichen Itza

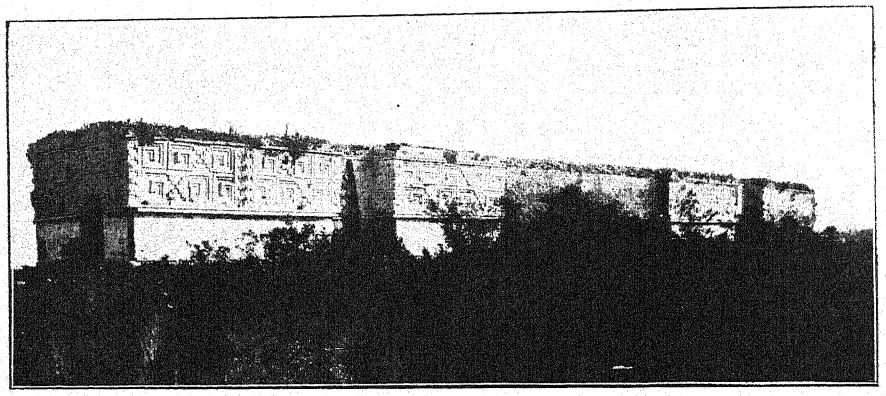


Fig. 848. — The House of the Governor. UXMAL.

the door jambs are ornamented with caryatids carved in relief, and similar figures in the round support stone tables, or altars. Fresco-paintings were a prominent feature of interior decoration.

The buildings of the aboriginal Americans are completely lacking in the hygienic conveniences which existed from the earliest times in Egypt and even in the palaces of pre-Hellenic Greece. The lords of Palenque, Mitla and Uxmal lived in narrow dark rooms enclosed within thick massive walls.

Outside, their buildings were decorated with ingenious designs of Grecian frets and other themes which suggest an earlier wood construction. We see reproduced in stone, lattice-work and banded columns, while the cornices are richly ornamented with feathers, zigzags and guilloches. Each geometric element is usually carved on a single stone in high relief; behind it is a tenon which is set into the mortar and rubble filling of the wall. We have seen many cases of this stone imitation of wooden structures in the early art of Europe and the Orient. Here however we find two distinct prototypes suggested; one a wooden building, and the other, an adobe structure faced with cut stone. Figures 849, 850 and 851 present some of the details of the principal building at Uxmal; the stone trellis work is certainly a survival of an older wood construction. It is interesting to note the projecting profile masks at the corners of some of these buildings (fig. 850). This face, supposed to be that of the rain-god, and the representation of the serpent form the favorite themes of Maya architectural decoration aside from the geometrical designs already discussed. The importance of the serpent in this art cannot be overrated.

Many investigators have attempted to establish a connection between the buildings of Central America and those of India and China. To support their contention they cite the fact that Japanese and Chinese junks have frequently been driven by storms and contrary winds across the broad Pacific to the western shores of America. It is possible that it is merely the result of coincidence that we find in Mexico this reproduction of wood construction in stone that is so characteristic of India, China and other parts of the Far East, as has been shown elsewhere in this volume. But it is natural that our interest in the origins of the

art of America should cause us to note the resemblances mentioned as well as the use of lime mortar in Mexico and Yucatan, a device never employed by the peoples of the Old World who did not come in contact with the civilization of the Orient. In some of the structures of America this might be due to the arrival of the Spanish conquerors, but the latter only occupied the cities and small colonized areas, and it is certain that in the tropical forests of Mexico and Yucatan people continued to live for some time as they had before the discovery of America. The explorers of the Nineteenth Century who studied these monuments describe the present inhabitants of many of the regions where the ruins are found as living an isolated life. Some of these writers believe it possible that there existed until recent years in certain districts cities like Uxmal and Mitla, inhabited by the descendants of the original builders.

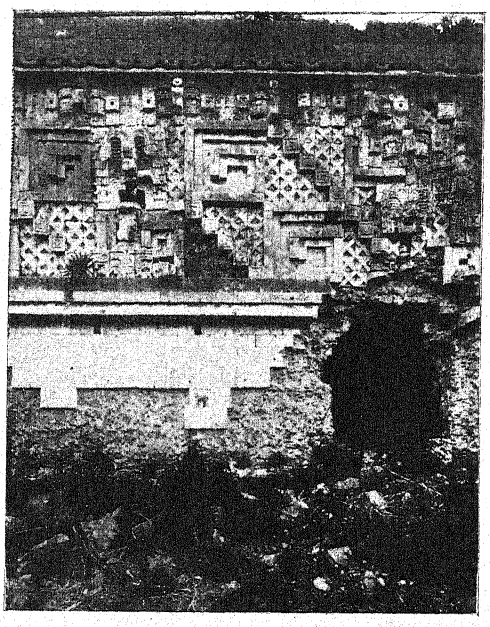


Fig. 849. — Stone mosaic on the façade of the House of the Governor. UXMAL.

The similarity of certain ornamental themes of the latest period of Mexican art with those of the Orient is certainly disturbing. The reliefs of the substructure of the teocalli at Xochicalco could be found in a Chinese bronze or ivory

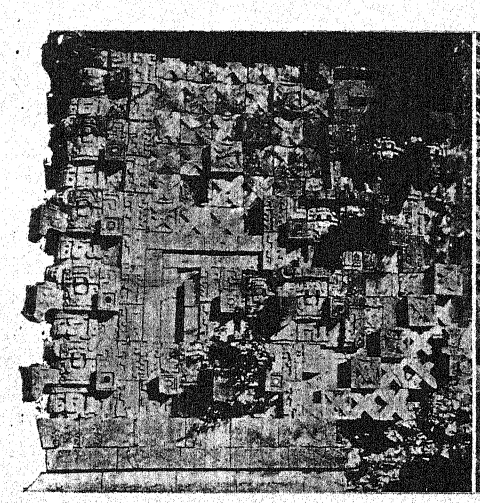


Fig. 850. — Corner of the House of the Governor. UXMAL.

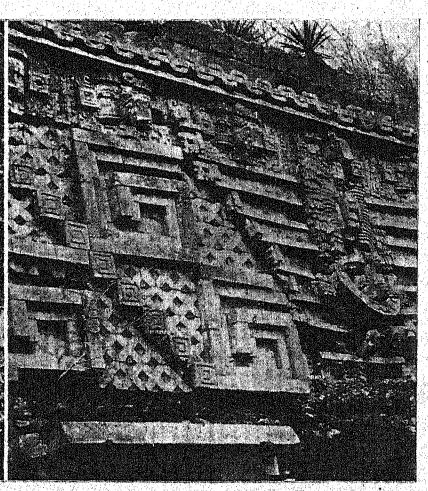


Fig. 851. — Façade decoration of the House of the Governor. UXMAL.

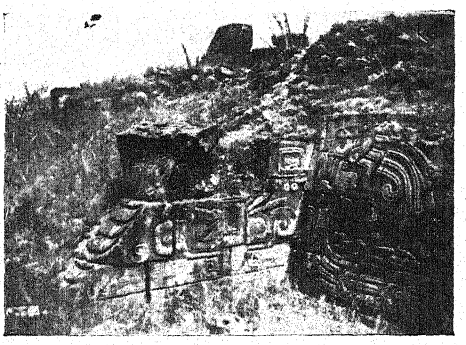


Fig. 852. — Reliefs on the teocalli of Xochicalco.

carving without arousing the slightest astonishment (figs. 852 and 853). Nevertheless, the connections can never be firmly established until a serious exploration of these monuments takes the place of the superficial examination which they have received up to the present time. Objects, implements, arms and everything associated with these remains will have to be carefully studied, as well as the languages, customs and beliefs of these Indians. It is safe to say that European and North American investigators have little more than begun a thorough exploration of the sort indicated.

Buildings have been discovered in Guatemala similar to those of Mexico and Yucatan, though perhaps not in such great numbers. We also find in Peru great stone structures of Cyclopean masonry, but lacking in sculptural decoration.

The Indians of North America had no monumental buildings. They lived in skin tepees, wooden lodges and houses of earth and wattle, and it is only in the Southwest of the United States that we find great communal houses of masonry sheltered by the walls of the cañons of that country as at Mesa Verde. Nor did the Indians of the pampas of South America possess an architecture worthy of the name.

Sculpture is also found only in Mexico, Central America, Peru and the adjoining countries. Not only is it applied to architectural decoration, but we find statues and commemorative monuments covered with reliefs. The Valley of Mexico is rich in stone more suitable for sculpture than that found in Yucatan. We reproduce two stelae, one typical of Maya and the other of Mexican art. The first is carved in low relief and represents a Maya warrior. Surrounding it are hieroglyphics similar to those found in the Maya manuscripts (fig. 854), although they are more formal and less cursive as would be expected in a monument. Another stela in the Kircher Museum at Rome is characteristic of the art of the highlands of Mexico and represents the symbol for the year (fig. 855). The angular lines and complicated character of these reliefs remind us of the decorations on the early Chinese bronzes. If they had been discovered in Manchuria or Mongolia, we should have readily accepted them as Oriental.

Fig. 853. — Terrace of the teocalli of Xochicalco.

PHOTO VALDEAVELLANO & CO.

The Queen (so-called). Stela at Quirigua. GUATEMALA.
On the sides are seen hieroglyphics similar to those of the Maya manuscripts.

In addition to their reliefs, the peoples of Central America executed admirable sculptures in the round. The warrior reproduced in figure 856 is, perhaps, dressed in tanned human skin. Hartman also discovered interesting statues of tufa when he explored the pyramid of Mercedes. The most interesting examples of native American sculpture are those in the National Museum of Mexico adjoining the Palacio Nacional. Here is the famous Tablet of the Cross from Palenque (fig. 858). This relief was discovered on the rear wall of the Temple of the Cross and is a masterpiece of aboriginal American sculpture. Two priests dressed in all the complicated trappings of the Mayas gravely worship or guard the cruciform symbol between them.

On either side is a lengthy hieroglyphic inscription of which only the date has been deciphered, and even that is evidently of a mythical character, for it records a day in the fourth millenium B.C. This was surely one of the principal temples of these people and the inscription is of a religious nature.

Fig. 854. — Pre-Columbian Maya Stela. *(Peabody Museum of Harvard University.)*

Fig. 855. — Mexican stela. *(Kircher Museum.)* ROME.

We now begin to distinguish the different styles of the reliefs and other sculptures of Mexico. The art of this country prior to the arrival of the Spanish conquerors consisted of a fanciful complication of elaborate decorative motives and human figures. This is seen in the sacrificial stone of the Great Temple of the Aztecs (fig. 859) and in the famous Calendar Stone upon which human victims were sacrificed in honor of the sun-god (fig. 860).

The former was undoubtedly carved in commemoration of the exploits of one of Montezuma's predecessors and many of the others may well be monuments of a similar character. This stone was discovered at Mexico City in the square in front of the cathedral in the early Nineteenth Century and was preserved thanks to the

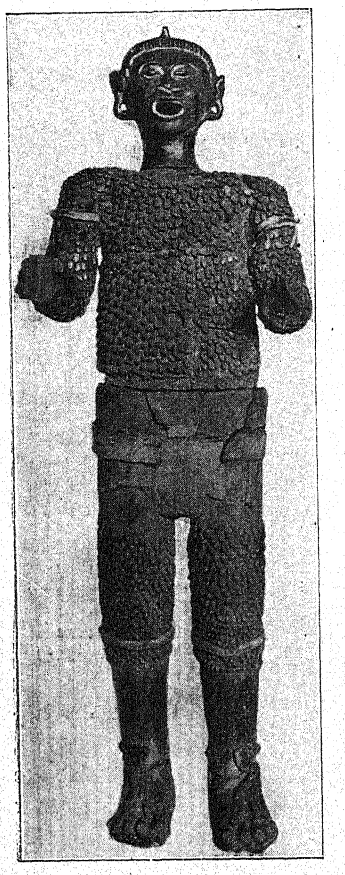


Fig. 856.—Statue of a warrior. *(National Museum.)* MEXICO CITY.

Fig. 857.—Maya altar at Tikal.

efforts of Canon Gamboa. The other was found in the foundations of the cathedral. Both were carved under the last Aztec rulers whose line was wiped out by the conquerors. There is a curious story connected with the significance and use of the former of these stones, based, no doubt, on the descriptions and accounts of the writers who came to Mexico soon after the conquest. They describe a gladiatorial game of which the Mexicans were very fond and which consisted in setting a prisoner of war upon a large round stone, attaching a smaller stone to one of his feet, giving him imitation weapons of wood and compelling him to defend himself against their best warriors. The victim fought until he was killed or badly wounded; in the latter case he was then sacrificed in the usual manner. It is said that the stone shown in figure 859 was used for this purpose.

The other, the so-called Calendar Stone (fig. 860), is ornamented in much the same manner, but is not detached from the rock on which it was carved. A somewhat similar stone, probably an altar, was discovered at Tikal in the Naya area (fig. 857).

Many of the sculptures of Yucatan are analogous to those of Mexico; Yucatan is in the Maya area, but there was for a time an extensive intrusion of Mexican culture. Here we find a type of figure that is distinguished for its extreme simplicity. The best example of this type is the so-called Chac-Mool figure discovered by Le Plongeon and now in the National Museum of Mexico (fig. 862). It is four feet nine inches long and it fulfils to a remarkable degree the laws governing sculptures which are intended to be viewed from the

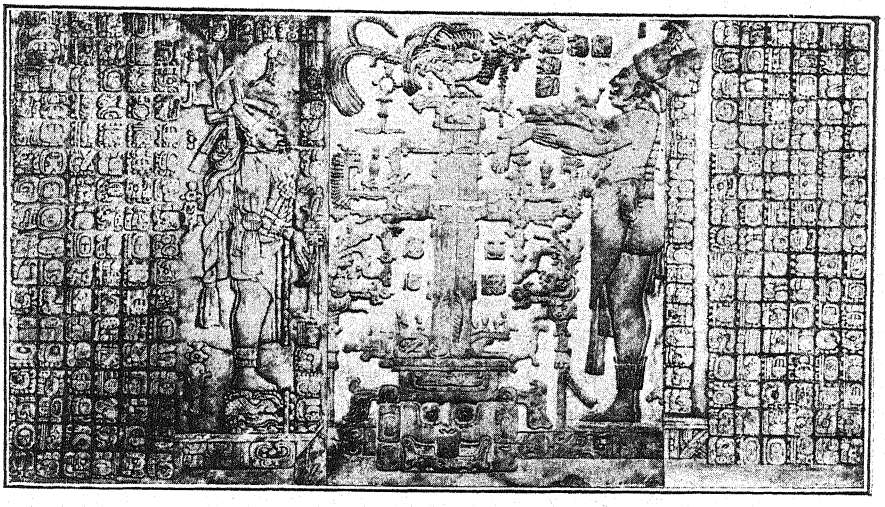


Fig. 858. — Tablet of the Cross from Palenque. Mexico.

front only. The body is seen in profile and the head is turned toward the beholder. It reminds us of the arrangement of some of the figures in the angles of the pediments of the Greek temples, and we see in this coincidence an illustration of the same fundamental principals which govern the art of every period and every race.

Nevertheless, in spite of many features common to both, the art of Central America differs greatly from that of Mexico. The further south we go, the rarer become the statues and other sculptures belonging to the art which had its centre in the Valley of Mexico. In Quirigua (Plate LIX and fig. 864) for example, which is in southern Guatemala, and in Copan in northern Honduras, we find the art of the Mayas in all its purity. The earlier sculptures of these people are simpler, but as time went on they became more elaborate and complicated through the addition of so many ornamental details that it becomes difficult to distinguish the outline of the figure itself, and we are reminded of the sculptures of the Far East. In figure 861 we see a sculpture from Copan which, although it is completely Maya in character, still seems to belong to that primitive American culture which extended as far as Peru. We see in it no traces of the later Aztec culture which had not as yet extended so far as this region.

Nevertheless, these hypotheses do not carry us very far at present. The monuments with their hieroglyphic inscriptions tell us little. All our conjectures based on the similarity of the style of certain Mexican and Peruvian monuments to those of the distant peoples of the Far East are, as we have already said, premature.

But an intensive study of the art of America has afforded more positive results. Here we see the existence of the fundamental laws governing the art of all primitive peoples, especially those formulated by Lange and Loevy. The tela at Quirigua (fig. 864) is an excellent example of this. The artist presents5ar

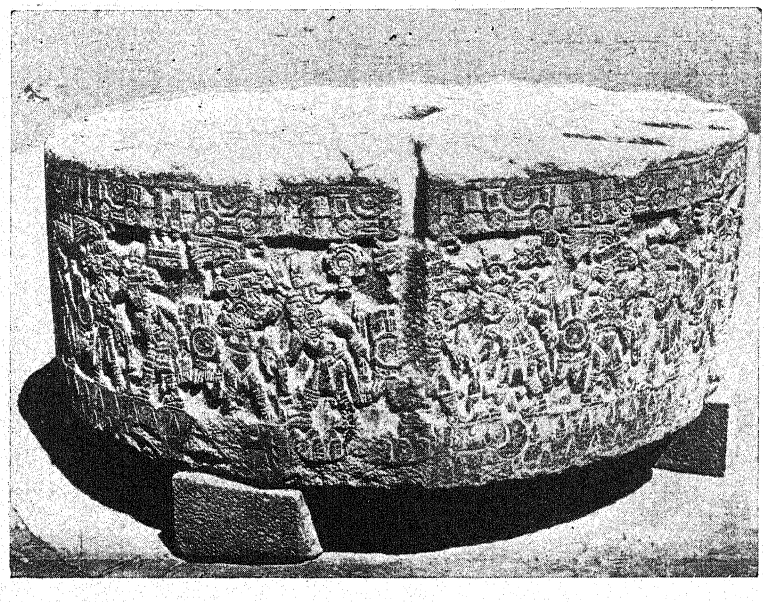


Fig. 859. — Sacrificial stone. *(Museum of Mexico.)*

Fig. 860. — Calendar stone. *(Museum of Mexico.)*

front view of the figure which is still rigidly encased in the monolithic stone block. For all its complicated ornamentation, a simplicity of spirit is not lacking. These aboriginal American artists are the interpreters of a people whose art, after reaching a stage where it became baroque, returned again to a childish simplicity through isolation or some other cause.

Fig. 861. — Sculpture from the ruins of Copan. HONDURAS.

It is interesting to note that while the architecture and sculpture of the Aztecs and Mayas had made such considerable advances long before the arrival of the Spaniards, ceramic art had not yet reached a higher development and was still largely decorated with geometrical themes. Mexican pottery with its two colors, red and ochre, is ornamented with zigzags, Grecian frets and squares, and while it displays considerable imaginative power, it is not superior to the work of many very primitive peoples (figs. 866 to 869). In the Maya pottery, especially that of the highlands of Guatemala, we find polychrome vases representing human figures and even scenes of ceremonies with hieroglyphic borders. The foreshortening of some of the bodies is poor and the skill displayed is inferior to that of the relief sculptures; nevertheless, some of this work is very beautiful.

In Peru, where sculptural decoration is scarcer, the vases themselves are often moulded in the form of a human figure, and we find here a school of ceramic sculptors who produced pottery at times comparable to European work. Pre-Columbian America was ignorant of the potters' wheel, but we find, nevertheless, very even and regular work, due solely to the manual skill of the potters. Their sculptural ability became such that it is not strange to find them making vases in the form of human heads. Some of these reproduced Indian types, painted and

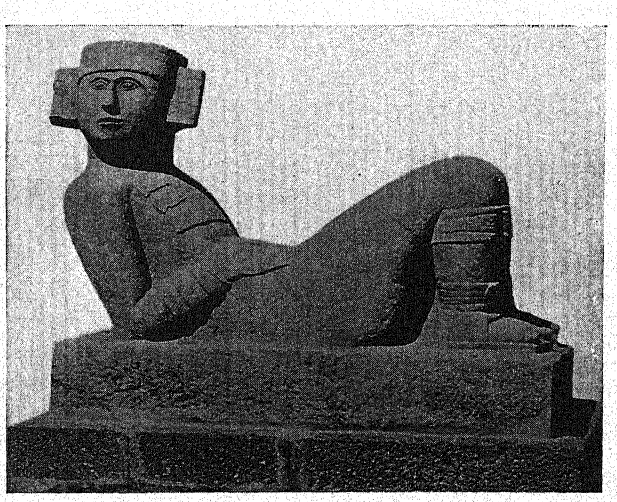


Fig. 862. — Maya figure from Yucatan showing an intrusive Mexican culture. *(National Museum of Mexico.)*

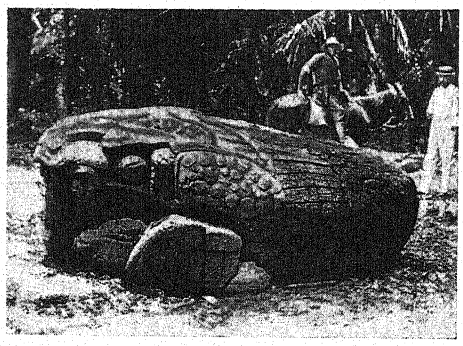


Fig. 863. — Turtle altar. QUIRIGUA.

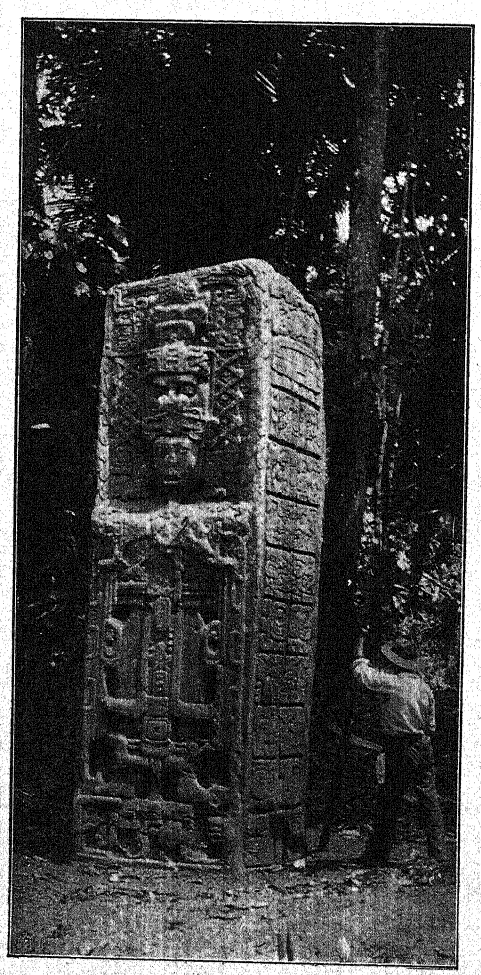


Fig. 864. — Hieroglyphic stela. QUIRIGUA.

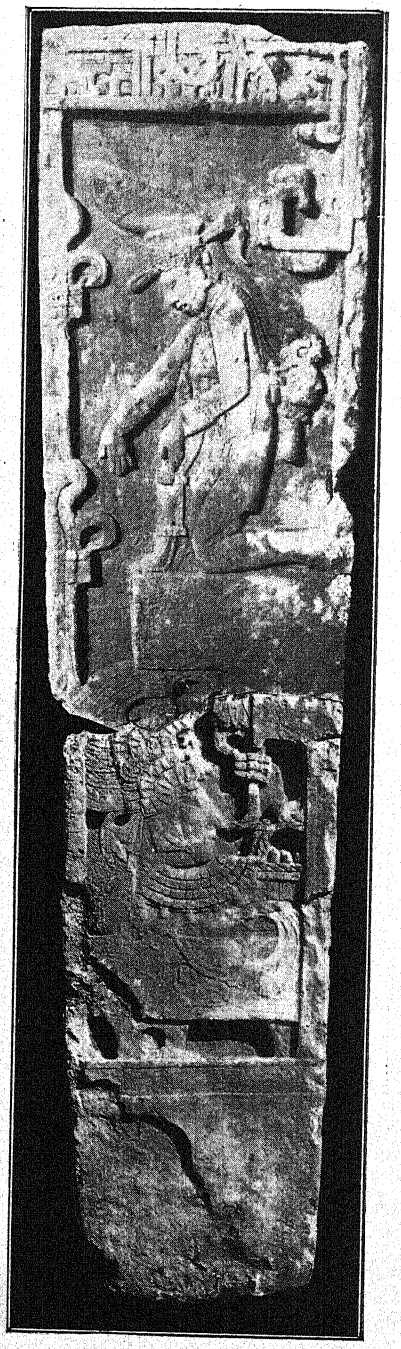
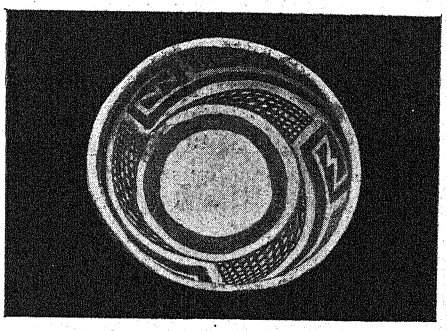
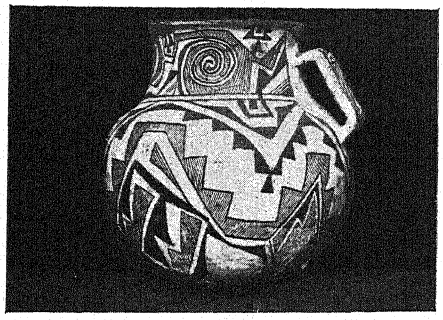
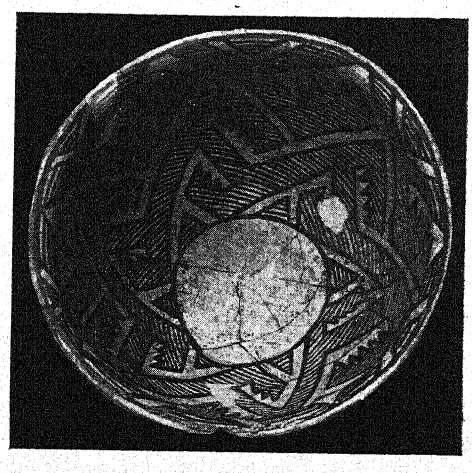


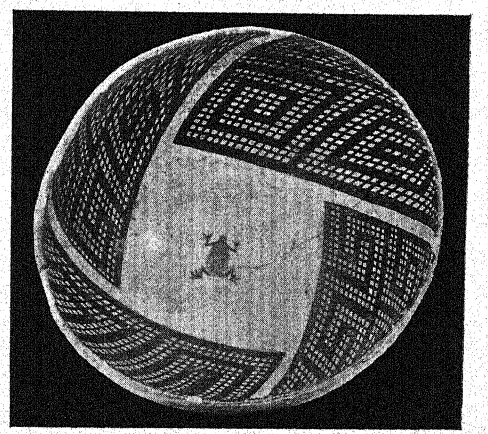
Fig. 865. — The Maize God.
Piedras Negras. GUATEMALA.
(Carnegie Institution.)





tatooed with an ethnological precision that is extraordinary (fig. 870). In addition to these heads, we find a series of Peruvian vases which represent the abnormal and deformed types observed by the conquerors. Some of these deformities were the result of native diseases which later spread to Europe in the most terrifying manner (fig. 871). These specimens have been studied by medical specialists, and besides the leprous types, others were found which were examples of some of our most malignant modern diseases. The use of these vessels is not known, and we are ignorant as to whether they were votive offerings of some sort or merely ordinary receptacles. In all of them we find the spout through which the contents were poured. In any case, these ancient Peruvian sculptors in stone had enlarged the scope of their work so as to include sculptures in pottery, and not only their human figures, but also their animal figures are extremely interesting.





Figs. 866 to 869. — Mexican pottery.

The spherical and cylindrical vases of Mexico and Peru were painted with geometrical decorations and conventionalized figures done in the most brilliant colors. Even after the Conquest, the potters of Peru continued to work more or less along the old lines and they still produce vases that are extremely interesting (figs. 872 and 873). They still turn the vessel with

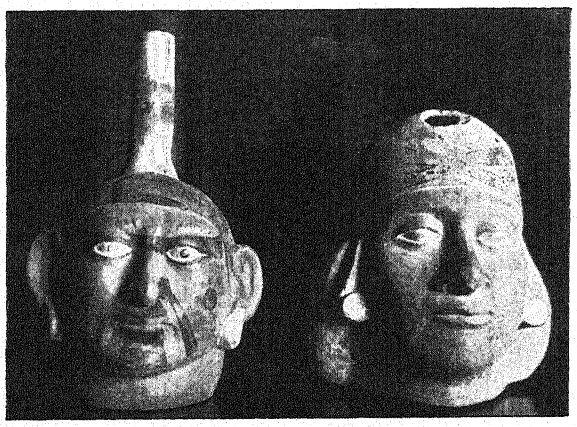
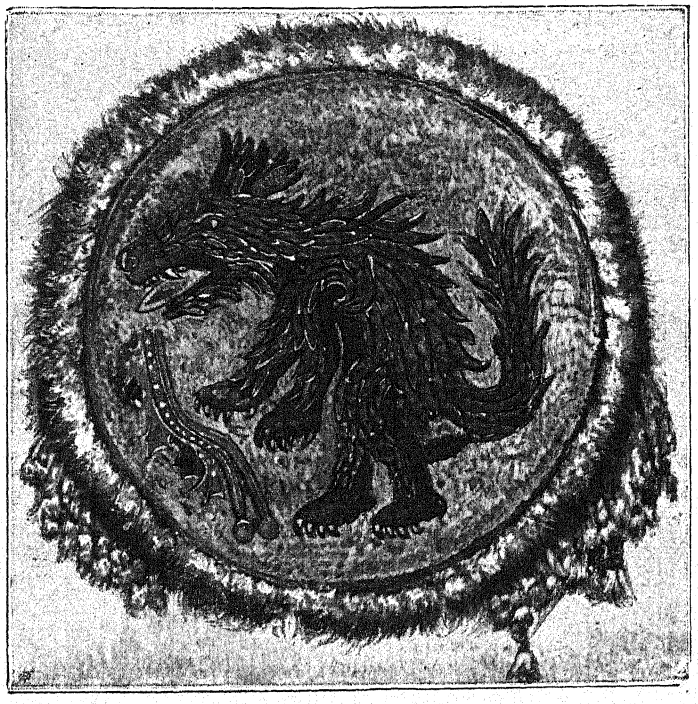


Fig. 870. — Vases representing human heads.

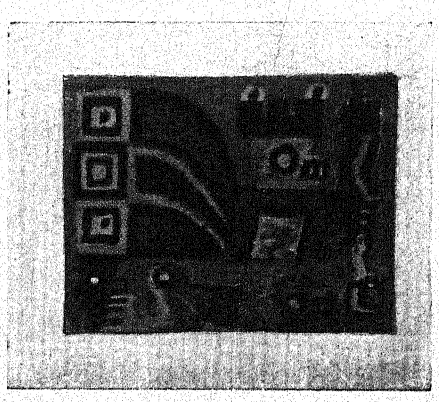
their hands, but the decorative styles have become colder and exhibit less imagination. It is interesting to observe how a preference for slanting lines still persists which rather startles us, accustomed as we are to the forms of classic art which are balanced on a vertical or horizontal axis (fig. 874). This taste for diagonal effects in decorative patterns is noted in the façades of their palaces and it is safe to say that this tendency is the most characteristic note of all aboriginal American art.

Monumental painting played an important part in architectural decoration. Even relief sculptures were painted various colors. In the palaces of Mitla and Yucatan we find many remains of fresco-paintings on stucco which are believed to represent mythological subjects. These are supplemented by the picture-manuscripts which also give us an excellent idea of the pictorial art of Mexico (figs. 834 to 838) with its brilliant combinations of colors. With the art of painting should be included the exquisite feather work worn by their military leaders and which may also have served to decorate the walls of their palaces, where sculpture was lacking. Ornamental feather-work was very general among the peoples of America. Their elaborate ceremonial costumes made of variously colored feathers were remarkable. In addition to the head-dresses and mantles

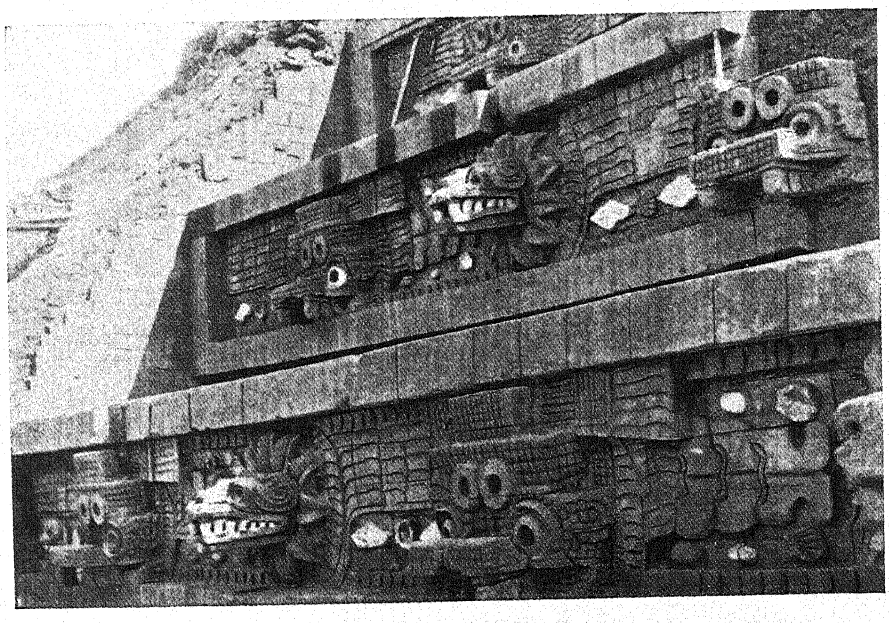
Fig. 871. — Vases representing the effect of disease.



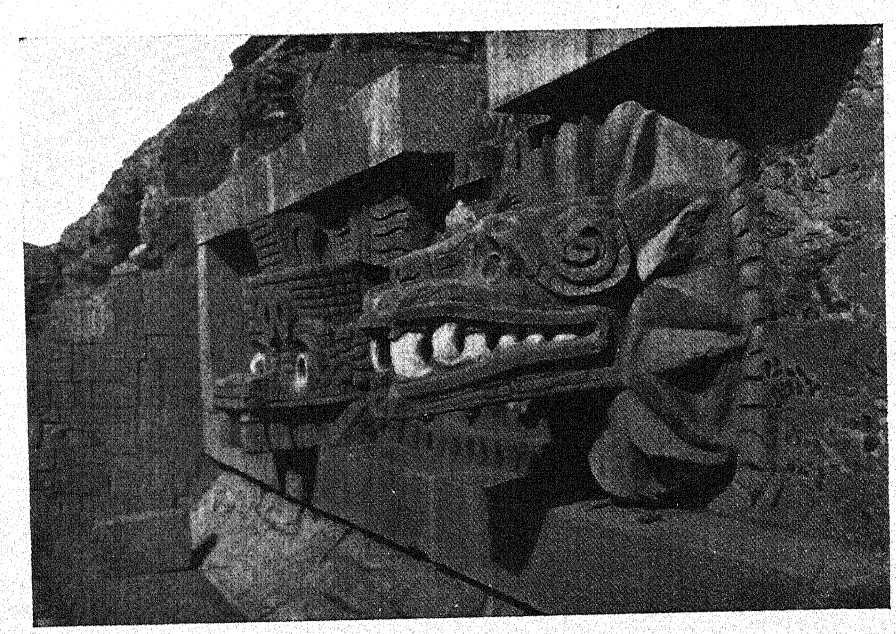
Mexican feather-mosaic. *(Museum of Vienna.)*



Specimens of Peruvian feather-mosaic. *(Ethnological Museum at Berlin.)*



Temple of Quetzalcoatl (the feathered serpent). TEOTIHUACAN.



Toltec decorative sculpture (detail of the preceding). TEOTIHUACAN.

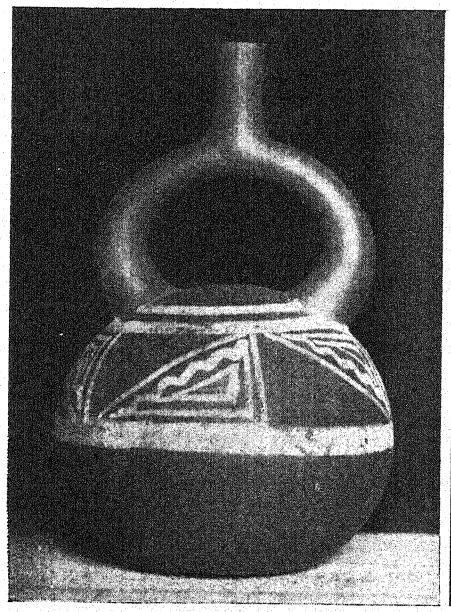


Fig. 872. — Modern Peruvian vase decorated with geometrical pattern.

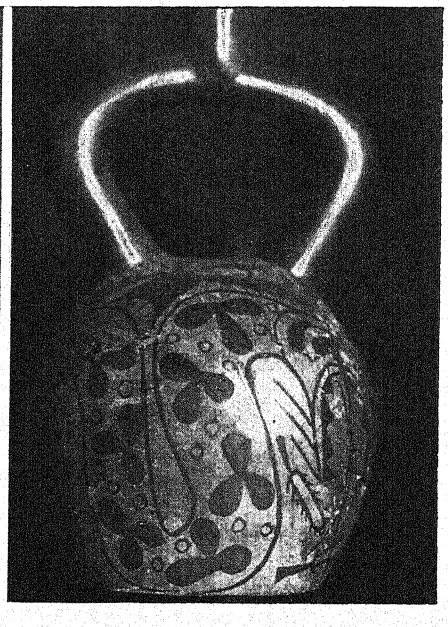


Fig. 873. — Modern Peruvian vase with floral decoration.

of feathers, the Indians of Mexico and Peru made tapestries with geometrical designs and animal forms by fastening the feathers to a fabric or joining them by tying. The most famous feather work of this sort is the well known series of mantles presented to Cortez by Montezuma. The Conqueror gave them to his sovereign Charles V who, in turn, sent them to Archduke Ferdinand. They had long been considered to be ruined when they were discovered in the Castle of Ambras in the Tirol, whence they were rescued and sent to the Museum of Vienna. Professor Seler has made a careful study of these pieces and has written a valuable monograph on their use. The one reproduced in Plate LX is a tapestry, but many of the others were insignia of rank. We also reproduce two polychrome pieces of feather-mosaic from Peru to show that this art was neither confined to Mexico nor to Central America.

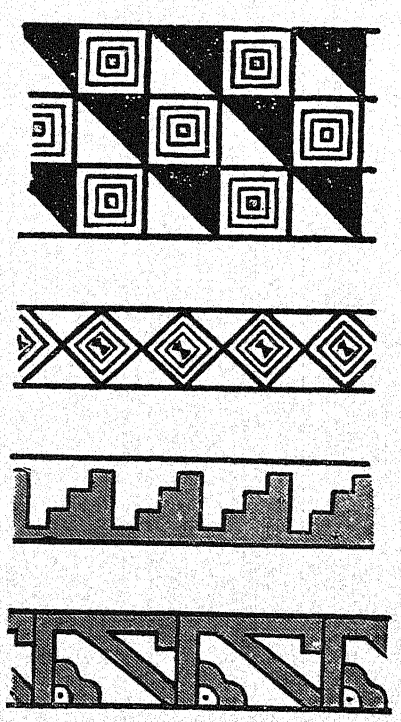


Fig. 874. — Typical Peruvian pottery decorations.

Summary. — We find in the various aboriginal civilizations of America a certain cultural unity, although they differ from one another in many particulars. The architecture of the nations of the highlands of Mexico has been almost completely destroyed by the Spanish conquerors, but the imposing remains of the Maya cities of Central America and Yucatan still exist. Important ruins of the ancient Toltec city of Teotihuacan are still to be found near Mexico City however. In the Maya cities of Central America the two most striking architectural features are the temple and the so-called palace. The former is a small but high structure set upon a steep pyramid, surmounted by a towering roof-comb. The latter is of two sorts. One type consists of four long narrow buildings surrounding a central court, the entire group being set upon a pyramidal substructure. The other type is a pyramidal structure with apartments set into the face of each section of the pyramid to which a monumental stairway ascends. In the Mexican area the roofs were flat and supported by beams, while the Maya buildings are surmounted by a pseudovault of projecting stones. The ruins of Mitla are noted for their stone mosaic decorations of a purely geometrical character. In the Maya cities we find both geometrical patterns and figures ornamenting the stone façades of the buildings. Imitations of wooden construction are seen in the stone lattice-work and banded columns of Yucatan. Stone sculpture is found only in Mexico, Central America and Peru. In the first two areas we have some statues in the round, and altars, lintels, door-jambs and stelae are richly carved in relief. The ceramic art of all three areas is important. In Mexico geometrical patterns predominated, but in Central America we find vases and other pottery decorated with human figures and hieroglyphic borders. In Peru where stone sculpture was less common, the vase itself was often modeled in the form of a human or animal figure. The realism and accuracy of some of these is surprising, and the coloring is very beautiful. In the ruined Maya cities of Central America the remains of frescos are found on the interior walls of many of the buildings. Ornamental feather-work was also an important art in aboriginal America. Especially noteworthy are the feather-mosaics from Peru and the handsome capes and head-dresses from Mexico now in various European museums.

Bibliography. — B. Sahagún: *Historia de las cosas de Nueva España.* — J. Torquemada: *Monarquía indiana.* — D. Durán: *Historia de las Indias de Nueva España.* — R. Cogolludo: *Historia del Yucatán.* — D. Landa: *Relación de las cosas de Yucatán.* — F. Clavijero: *Historia antigua de México.* — J. Stephens: *Incidents of Travel in Yucatan.* — Dupaix: *Antiquités américaines,* 1836. — E. K. Kingsborough: *Antiquities of Mexico,* 1843. — D. Charnay and Viollet le Duc: *Cités et ruines américaines,* 1863. — W. H. Holmes: *Archaeological studies among the ancient cities of Mexico,* 1895-1897. — A. Chavero: *Antigüedades mexicanas,* 1892. — A. Peñafiel: *Monumentos del arte mexicano antiguo,* 1900. — Hartman: *Archaeological researches in the Pacific coast of Costa Rica,* 1907. — E. Seler: *Gesammelte Abhandlungen,* 1902-1908. — M. Uhle: *Kultur und Industrie südamerikanischer Völker,* 1889. — J. W. Fewkes: *Antiquities of Mesa Verde National Park,* 1911. — H. J. Spinden: *Maya Art.* — Manuel Gamio: *Teotihuacán.*

Periodicals. — *Zeitschrift für Ethnologie. Anales del Museo Nacional de México. Bureau of American Ethnology Bulletins. — Ecole Pratique des Hautes études: Section des sciences religieuses. Revue d'histoire des religions. Hojas Selectas. Art and Archaeology.*

END OF VOLUME I

Fig. 875. — Pre-Inca vases from Pachacamac. Peru.

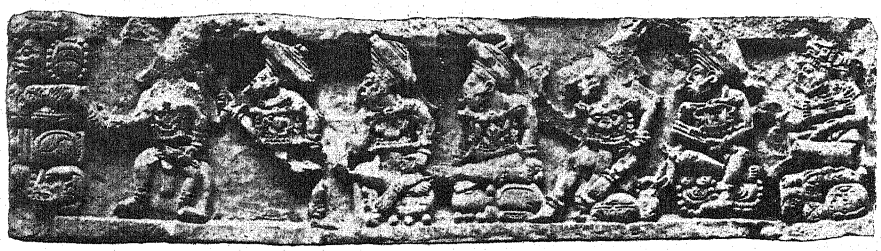


Fig. 876. — The Astronomical Congress at Copan, held Sept. 2nd, A.D. 503. *(Spinden.)*

ALPHABETIC LIST

OF

ARTISTS, ARCHÆOLOGISTS, CRITICS, &C., MENTIONED IN THE TEXT.

Abdallatif, 38.
Adler, 234.
Aemilius Lepidus, 393.
Aëtion, 326.
Ageladas, 255, 267.
Agesander, 361.
Aglaophon, 322.
Albani (Cardinal), 186.
Alcamenes, 242, 295.
Alexander, 315, 324, 329, 334, 341.
Alexandros, 310, 317.
Altmann (W.), 466.
Amasis, 262.
Amelineau, 54.
Amelung (W.), 328, 466.
Anderson (John), 184.
Andrae (W.), 124.
Antenor, 228.
Apelles, 324.
Apollodorus, 340, 440.
Arcelin, 40.
Archermus, 229, 237, 342.
Aristander, 310.
Aristeas, 344.
Aristotle, 322.
Arndt (P.), 368.
Artemisia, 313.
Ascott (J.), 208.
Asinius Pollio, 362.
Athenodorus, 361.
Atiret, 177.
Augustus, 384, 387, 399, 410, 423.

Barnabei (F.), 432.
Batrachus, 431.
Bendorff (O.), 234.
Bénedite (G.), 92.
Bernouilli (J. J.), 328, 368, 432, 466.
Beylie (L. de), 167, 184.
Binyon (L.), 184.
Bissing (W. v.), 92.
Boas (Franz), 16.
Boëthus, 345, 348.
Boni (G.), 398.
Bonsor (J.), 158.
Borchardt, 54, 76.
Boscawen (W.), 124.
Botta, 96, 97, 113, 115, 117, 124, 128.
Boyd (H.), 208.
Breasted (J. H.), 54, 92.
Breuil, 21, 36.
Bruckmann (H.), 328, 368.
Brunnow (R. E.), 502.
Bryaxis, 313, 343.
Bushell (S. W.), 184.
Byron (Lord), 271.

Calderini, 466.
Callimachus, 284, 295.
Canova, 187.
Capart, 54.
Caracalla, 335, 363.
Carnegie, 506.
Carrey (Jacques), 271.
Cartailhac, 36.
Cephisodotus, 297, 304, 307.
Cesnola (L. de P.), 158.
Champollion, 39, 94.
Charnay (D.), 524.
Chavannes (E.), 173, 184.
Chavero, 506, 524.
Chares, 359.
Chipiez, 54, 76, 82, 124, 138, 151, 158, 193, 208, 234.
Cicero, 315, 320, 400.
Cicorius (C.), 466.
Claudius, 412.
Clavijero (F.), 524.
Clitias, 262.
Cogolludo, 505, 524.
Collignon (L. M.), 234, 262, 290, 328.
Constantine, 494, 499.

Conze (A.), 328.
Coste, 138.
Coubeaud (E.), 432.
Courbaud (E.), 466.
Couve, 262.
Cresilas, 259, 295.
Critias, 250.
Cros (Gaston), 108.
Cumont (F.), 502.
Curtius, 234.
Cyriac of Ancona, 186.

Daedalus, 196.
Damophon, 365.
Davies, 76, 108.
Déchelette, 36, 158.
Delatre (F.), 154.
Delbrück (R.), 398.
Déonna (W.), 234.
De Romanis, 432.
Dickins (G.), 398.
Dietrichson (L.), 466.
Dieulafoy, 128, 132, 138.
Diocletian, 490.
Diodorus, 37, 269.
Dionysus, 337.
Di Pietra, 328.
Domaszewski, 466, 502.
Dörpfeld (W.), 188, 195, 208, 262, 368.
Duhn (F.), 432.
Dupaix, 506, 524.
Durán, 505, 524.
Durm (J.), 234.
Dussaud (R.), 208.

Ebers (Georg), 76.
Ehrenreich, 16.
Elgin (Lord), 187, 271.
Engel, 158.
Ergotimos, 262.
Ernst, 234.
Esperandieu (E.), 502.
Euphranor, 308.
Eupompus, 315.
Eutychides, 345.
Evans (A. J.), 196, 203, 208.

Fairbanks (A.), 290.
Fenger (L.), 398.
Fenollosa (E.), 184.
Ferlini, 83.
Fergusson (James), 184.
Fergusson (John), 184.
Fewkes (J. W.), 524.
Flandin, 96, 128, 138.
Flinders Petrie, 54, 76, 92.
Foucher (A.), 184.
Frickenhaus (A.), 234.
Frothingham (J.), 466.
Fulvius Aemilius, 392.
Furtwaengler (A.), 208, 243, 262, 328, 368.

Gamio (M.), 506, 524.
Gardner (E. A.), 234, 290, 328.
Garstang, 54, 82, 92, 141, 158.
Gauckler (P.), 368, 502.
Gerhardt, 186.
Giles (A.), 184.
Gonse (L.), 182, 184.
Graef (P.), 234.
Grosse, 2, 16.
Grotefend, 95.
Grunwedel (A.), 184.
Gsell (P.), 502.
Gusman (P.), 432, 466.

Hadrian, 330, 344, 412, 437, 446, 486.
Halbher (F.), 196, 208.
Hall (H. R.), 208.
Harper (R. F.), 108.
Hartman, 524.
Hauser (F.), 368.
Haussoullier, 368.
Hawes (C. H.), 208.
Hekler (A.), 368.
Helbig (W.), 328, 398.
Hermogenes, 340.
Herodes Atticus, 332, 337.
Herodotus, 37, 40, 47, 60, 70, 104, 188, 376.
Herzfeld, 138.
Heuzey (Leon), 98, 99, 108, 157.
Hilprecht (H. W.), 101, 108, 111.
Hippodamus, 332.
Hithorf (F.), 234.
Hobson (L. R.), 184.
Hoffman (W. J.), 16.
Hogarth (D.), 158.
Hokusai, 179.
Holmes, 506.
Holzinger (H.), 466.
Holleaux, 368.
Homer, 188, 207.
Homolle (T.), 262, 368.
Horace, 410.
Hoskins, 92.
Huelsen (Ch.), 466.
Hulssen (Ch.), 398.

Ictinus, 270, 282, 292.

Jastrow (M.), 108, 124.
Jones (H.), 466.
Joubin (A.), 262.
Joulin (L.), 158.
Julius Cæsar, 32, 393.

Kabbadias (P.), 234, 262, 328, 368.
Kanaoka, 177.
Karo (G.), 398.
Kawerau, 234.
Kekulé (S.), 290.
King (L. W.), 108, 124.
Kingsborough (Lord), 506, 524.
Kisa (A.), 368.
Klein (K.), 290.
Klein (W.), 328.
Koldewey (R.), 102, 108, 111, 234.

Lanciani (R.), 432, 466.
Landa, 505, 524.
Lang (A.), 208.
Lange, 16, 517.
Laufer (B.), 184.
Layard (A. H.), 96, 115, 117, 124.
Leaf (W.), 208.
Lechat (H.), 234, 262.
Lehman, 506.
Le-Nôtre, 182.
Leochares, 308, 313.
Lepsius, 76.
Lermann (W.), 234.
Loescare, 208.

Loevy (M.), 16, 517.
Loewy (E.), 234, 262.
Luynes (Duc de), 186.
Lysippus, 233, 315, 322, 345, 349, 422.
Lysistratus, 349.

Mackenzie (D.), 31, 36, 208.
Maecenas, 408.
Malfatti (P.), 432.
Manatt, 208.
Marcellus, 436.
Marcus Aurelius, 451, 495.
Mariette, 39, 44, 48, 76, 85.
Martha (J.), 398.
Marucchi (H.), 502.
Maspero, 39, 54, 89, 92, 108.
Mau (A.), 432, 502.
Maudslay, 506.
Mausolus, 313.
Maxentius, 491.
Menelaus, 397.
Michael Angelo, 317, 361, 420, 441
Michaelis (A.), 212, 290, 367.
Milani (L. A.), 398.
Modestow (B.), 398.
Mommsen, 369.
Montelius (O.), 398.
Morgan, 42, 43, 54, 57.
Morley, 506.
Muller (Sophus), 36.
Münsterberg (O.), 184.
Murray (A. S.), 158.
Myron, 252, 255, 262, 319.

Napoleon, 38, 44, 82, 85.
Naville, 76, 77.
Nearchus, 262.
Nero, 419, 433.
Nerva, 438, 454.
Nesiotes, 250.
Nicole (G.), 290.
Nicole (P.), 290.
Niebuhr, 94, 97.
Niemann, 158.
Nogara (B.), 328.

Okakura (K.), 184.
Olmstead (A.), 124.
Onatas, 250.
Oppert, 107, 108.

Paeonius, 242.
Papias, 344.
Paris (P.), 158, 262.
Parrhasius, 322.
Pasiteles, 397.
Pausanias, 190, 195, 214, 218, 228, 239, 261, 272, 286, 303, 337.
Pedrizet (P.), 368.
Penrose, 270.
Peñafiel, 524.
Pericles, 266, 270, 278, 289, 337.
Pernull, 234.
Perzynski (F.), 184.
Perrot (G.), 54, 76, 82, 124, 138, 158, 208, 234.
Petersen (E.), 158, 398, 406, 432, 466.
Pettrucci (R.), 184.
Phidias, 229, 239, 267, 276, 286, 295, 315.
Philip, 293.
Philiscos, 362
Phradmon, 259.
Piette (E.), 36.
Place (Victor), 97, 113, 117, 124.
Plato, 37, 274.
Pliny, 32, 38, 284, 302, 315, 334, 343, 360, 394.
Plutarch, 269, 278.
Polybius, 126.
Polycleitus, 252, 260, 267, 315, 350.
Polydorus, 361.
Polygnotus, 267, 277, 286, 317, 322.
Pontremoli, 368.
Pottier (E.), 368.
Praxiteles, 233, 278, 294, 300, 310, 315, 320, 343.
Prisse d'Avennes, 76.
Puchstein (O.), 141, 158, 234.
Pyrgoteles, 366.
Pythagoras of Rhegium, 250.
Pythis, 334, 341.

Raphael, 420, 441.
Rassam (H.), 97, 121, 124.
Rawlinson, 95.
Rayet (R.), 290.
Renan, 144, 158.
Revett, 187.
Ricci, 16.
Richter, 158.
Riegl (A.), 464, 466, 502.
Rivière (Emile), 22.
Rivola, 234.
Rodenwaldt (G.), 208, 432.
Rogers (R. W.), 108, 124.
Román (J.), 158.
Rosenberg (M.), 92.
Rossellini, 92.
Routledge, 16.

Sahagún, 505, 524.
Salinas, 145.
Sarre, 138.
Sarzec (Ernest de), 99, 101, 108.
Sauer (B.), 290.
Sauros, 431.
Sautuola (M. de), 21, 22.
Sayce, 83, 108.
Schliemann, 188, 195, 205, 208.
Schrader (B.), 502.
Schrader (H.), 262.
Schrammen (J.), 368.
Schreiber (T.), 368, 432.
Scopas, 278, 292, 310, 315, 322
Seler, 506, 523, 524.
Septimus Severus, 489.
Sesshu, 177.
Sie-Ho, 181.
Siret, 158.
Sligo (Lord), 193
Socrates, 322.
Spiegeberg, 76.
Spinden (H. J.), 506, 524.
Stark (K. B.), 328.
Stein (A.), 184.
Steinen (K. von den), 16.
Stephanus, 397.
Stephens, 506, 524.
Stolze (F.), 138.
Strabo, 38, 62, 66, 70, 93
Strong (E.), 432, 466.
Strzygowski (S.), 466.
Stuart, 187.

Studnitzca (F.), 432, 502.
Sully, 16.
Sven Hedin, 173.
Svoronos (J. N.), 262, 368.

Taramelli, 31, 36.
Themistocles, 264, 270.
Theocritus, 341.
Thomas, 97.
Thureau-Dangin (F.), 108.
Tiberius, 454.
Tiersch (H.), 368.
Timanthes, 323, 422.
Timonachus, 364.
Timotheus, 313.
Titus, 360, 419, 433, 451.
Torquemada, 505, 524.
Trajan, 437, 449, 479.
Tsountas, 208.

Uhle (Max), 506, 524.

Vaglieri (D.), 502.
Vernier (E.), 92.
Vespasian, 433, 454.
Vilanova (Juan), 22.
Villefosse (A. de), 368.
Vincent (H.), 158.
Viollet le Duc, 524.
Virgil, 413.
Vitruvius, 330, 337, 340, 384, 388.
Vives Escudero, 158.
Vogué (M. de), 158.

Waldstein (Ch.), 262, 290.
Wallis (H.), 92.
Wallis Budge, 92.
Walters (H. B.), 502.
Wedgwood, 367.
Weill (R.), 54.
Wickhoff (F.), 432.
Wiegand (W.), 368.
Winckelmann, 38, 185.
Winckler (H.), 108.
Winter (F.), 328, 368.
Wood (J.), 234.
Wright, 158.
Wurz (H.), 398.

Yule (H.), 184.

Zayas (M. de), 16.
Zeuxis, 262, 322.

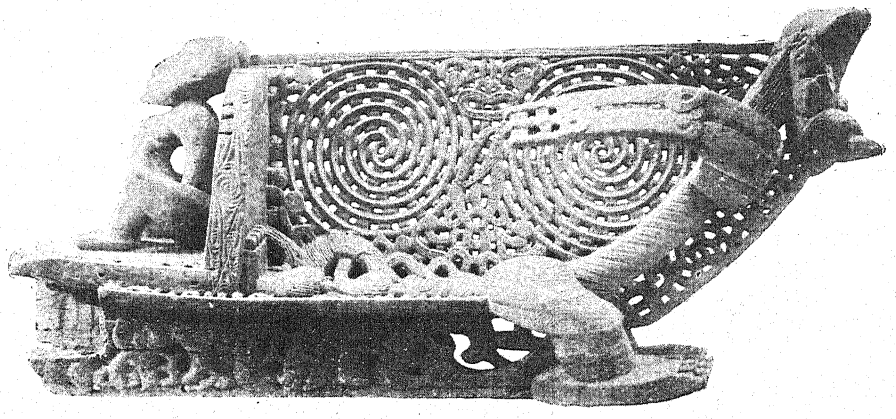


Fig. 877. — Prow of a Maori canoe. NEW ZEALAND.

LIST OF ILLUSTRATIONS

Page

Roman eagle from the Trajan's Forum. Rome I
Pre-Hellenic girl on the swing. XVth Century B.C. Crete. VI

MODERN PRIMITIVE ART

Entrance to the house of an Alaskan Indian. I
Typical child's drawing I
Ornamental scarification. Congo. 2
Tatooed hand of a native of the Marquesas Islands. 2
Incised carving in a cave of Santo Domingo. 3
Design in a cavern of the Sierra Prieta. Santo Domingo. 3
Ornamental designs of the Indians of Brazil. 4
Australian shield. 4
Prow of a Maori canoe. New Zealand 5
Decoration of a wooden chest. Maori Art. New Zealand. 5
Wooden throne. Negro Art. The Congo. 6
Articles carved from ivory by the Esquimos. 7
Small bone carvings by Esquimos representing caribou. 7
Bone carving made by the Esquimos of Prince of Wales Island. . . . 7
Totem pole. Jasper Park. Canada 8
Grave sculptures. East Island 9
British Columbian ceremonial dance-mask 10
British Columbian Indians dressed as totem-animals. 10
Rock paintings made by the Indians of the United States. 11
Bushman drawing of leaping antelope 11
Fresco representing a hunter disguised as an ostrich. Africa. 12
Dromedaries. (Arabian rock drawing) 12
Bushman rock paintings. Rhodesia. Central Africa. 13

Page

Fresco representing a battle between Bushmen and negroes. 14
Circular huts of the natives of the Congo. 15
Ceremonial head-dress for a dance. Alaska. 16
Megalithic monument at Stonehenge. England 17
Stone axe. San Isidro. Madrid. 18
Dart-thrower from Bruniquel. (Saint Germain Museum) 19
Horse carved from ivory. (Lourdes) 19
Group of horses. Cave of Bruniquel. (Tarn-et-Garonne). 20
Bisons modeled from clay. Cave of Tuc d'Audoubert. (Ariège) . . . 20
The Brassempouy Venus (torso). 21
Head of the Venus of Brassempouy. 21
Horse sculptured in the cave of Cap Blanc. 21
Reindeer. Cave at Font de Gaume. (From Breuil). 22
Hunting scene. Painting in the Cueva de los Caballos. Almería. . . . 23
Battle scene. Cave of Civil. 23
Axes of polished stones. 24
Stone axe and handle of deer-horn. 24
Menhir at Vallvenera. Gerona. Spain 25
Plan of dolmen. 26
Dolmen at Urbe near Crocq-en-Creusse. 26
Dolmen in Syria. 27
Cueva de Menga near Antequera. Spain. 27
Taula on the farm of Torrauba d'en Salort. Minorca. 28
Taula on the farm of Talatí de Dalt. Minorca 29
Talayot on the farm of Curnia. Minorca. 30
Naveta on the farm of d'es Tudons. Minorca. 31
Nuraghi of Santa Bárbara. Sardinia. 32
Sardinian idol. Bronze statue representing a warrior. 33
Bronze image of Sardinian goddess-mother. 33
Nuraghi used as temple. Mouth of sacred well. Sardinia. 33
Stairway descending to the sacred well of the temple-nuraghi. . . . 33
Interior of prehistoric temple. Malta. 34
Small prehistoric figures showing tatooing. Roumania. 34
Collar or bronze ring. (British Museum). 35
Celtic enameled bronzes. (British Museum). 35
Bison painted in the cave of Marsoulas. France. 36

Prow of a Maori canoe. New Zealand 531

EGYPTIAN ART

Pyramids of Abusir, erected hy Nuserre and restored by Borchardt. . . 37
Situation of the pyramids in Lower Egypt 37
The stone that was the key to the Egyptian hieroglyphics. 38
Flint knives of the Predynastic Age. 39
Prehistoric clay figurines showing tatooing 40
Predynastic pottery 40
Plan of the so-called tomb of Menes, the first Pharaoh. 41
Striated decoration on the outside of the tomb of Menes. 41
Carved slate palette from the predynastic period. 42

Page

Ornamented slate palette dating from the predynastic period. 43
Group of mastabas. (Perrot and Chipiez). 44
Pyramid with double slope. 45
Pyramid of Mencheres, or Mycerinus. 45
Remains of the so-called Temple of the Sphinx. 46
Royal temple connected with one of the pyramids of Abusir. 47
Temple connected with the pyramids of Abusir. 48
Sphinx at Memphis. 49
Statue of Chefren 49
Priest of Memphis. 50
Head of an Egyptian of the Old Kingdom. 50
Ka-aper. (Cairo Museum) 51
Portrait statues of Sesostris I. (New York Museum). 51
Wooden figure of a woman. (Museum of Leyden). 52
Wooden reliefs found in Hesi-ra. Memphis. (Cairo Museum). 53
Seated scribe (Louvre). 54
Colossi of Amenophis III. Thebes. 55
Plan of the temples and necropolis of Thebes. 55
Excavations of the temple-tomb of Mentuotep V. 56
Restoration of the temple-tomb of Mentuotep V. 57
Cliff at Abydos containing the royal tombs 58
Portico of Der el-Bahri, the temple-tomb of Queen Hatasu. 59
Schematic plan of an Egyptian temple 60
Temple of Karnak. Thebes. 61
Entrance to the temple of Horus, at Edfu. 62
Court of an Egyptian temple. Entrance to the hypostyle hall. 63
Pylon, or monumental gateway of a temple. 64
Ruins of the court and entrance to the hypostyle hall. Ombos. 65
Entrance to the hypostyle hall of the Ramesseum. Thebes. 66
The Ramesseum in course of excavation. Thebes. 67
Egyptian Sacrarium in a temple. 68
Wall of the temple of Luxor covered with reliefs. Thebes. 69
Sphinx with the head of a king. (Cairo Museum). 70
Portrait of Toutmosis III. (British Museum). 71
Portrait of Amenhetep III. (British Museum). 71
Stela of Amenophis III. 71
Portrait of Akhenaton (New York). 72
Akhenaton and his wife Nefer-nefru-aton. 72
Queen Nefertari. Luxor. 73
Group of Amenophis II and Hathor in a chapel. 74
Tomb of the son of Rameses III. Thebes. 75
Tomb of a princess. Thebes. 75
Portrait of Rameses II. (Museum of Turin). 76
The great speos at Abu-Simbel. Nubia. 77
The Nile valley in the Nubia 77
Plan of the great speos at Abu-Simbel. Nubia. 78
One of the colossi of the great speos at Abu-Simbel. 79
Façade of the small speos of Abu-Simbel. Nubia. 80
Plan of the small speos of Abu-Simbel. 80
Hemispeos of Garf Husen 81

Page

Restoration of the temple of Elephantine. 81
Plan of the temple of the Sun at Meroe. 82
Pyramid at Meroe 82
Island of Philae before the construction of Assuan Dam. 83
The great temple of Isis at Philae half submerged 84
Island of Philae. One of the kiosks. 85
Portico of the Temple of Philae 86
Portrait of Philip carved on the walls of Karnak. 87
Portrait of a Saite princess. (Vatican Museum). 88
Sculptor's model of the twenty sixth dynasty. 88
Porphyry statue of Osiris. (Cairo Museum). 89
Statue of a Saite queen wearing the symbols of Hathor 89
Bronze of the Lady Takusit. (Museum of Athens). 89
Sculptor's model. Small chickens. New York. 90
Canopic vases 91
Egyptian chair. (British Museum) 91
Egyptian jewels. (New York Museum). 91
Bas-relief showing the conquered foes of Egypt 92

BABYLONIA AND ASSYRIA

Excavations at Lagash. (Sarzec-Heuzey) 93
Map showing the ancient cities of Babylonia. 93
Palace gate at Lagash. (Sarzec-Heuzey) 94
Plan of the palace at Lagash. 94
Palace at Lagash with its striated façade. 95
Vault at Lagash 95
Towers of the Ishtar Gate of the palace quarter. 96
Restoration of the royal palace of Babylon. 97
Plan of the temple of Ninmah. Babylon. 97
Restoration of the stage-tower of the temple of Bel. 98
Restoration of the temple of Bel, or Marduk, at Babylon. 98
Tablet of Ur-Niza and his sons. 99
Statue of Gudea (Sarzec-Heuzey) 99
Statue of Gudea called the Architect. (Sarzec-Heuzey). 100
Shaved head from Lagash 101
The so-called «head with the turban» 101
Female figure from Lagash 102
Shamash in his temple at Sippar. 102
Stela of Naram-Sin. (Louvre) 103
Babylonian stela of Marduk-Nadin-Akhi. 104
Amulet from Lagash in the form of a bull. 105
Lion with human head 105
Sirrush, or dragon. Glazed tile on the Ishtar Gate. Babylon. 106
Repoussé silver vase from Lagash. (Louvre). 107
Extension of a Babylonian cylinder 108
Assyrian warriors with their engines. (British Museum). 109
The triangle of Assyria 109
Restoration of the double temple at Assur. 110
Plan of the temple of Assur 111

Page

Plan of the palace at Khorsabad 112
Restoration of the palace at Khorsabad. 113
Ziggurat of the palace at Khorsabad 114
Gateway of the royal palace at Khorsabad. 115
Winged bull from Khorsabad 116
Head of Assyrian winged bull 117
Plan of the entrance of the enclosure at Khorsabad. 118
Vault of one of the drains at Khorsabad. 118
Statue of Nabu. (British Museum). 119
Statue of Assur-nazir-pal. (British Museum). 120
Wounded lionness in a hunting scene from the palace at Kuyunjik . . . 121
Assyrian deity. (British Museum) 122
Assyrian eunuch. (Museum of New York). 122
Captives transporting beams and other building materials. 123
Enameled tiles from Khorsabad. 123
Assyrian god. (New York Museum). 124
Terrace at Persepolis and the remains of the royal palaces. 125
The cities of ancient Persia 125
Plan of the tomb of Cyrus 126
The tomb of Cyrus at Pasagardae 127
Plan of the platform at Persepolis 128
Propylaeum at Persepolis 129
One of the columns of the Propylaeum at Persepolis. 130
Restoration of the Hypostyle Hall of Xerxes at Persepolis 131
General view of the Palace of Darius at Persepolis. 132
Doorway of the Palace of Darius surmounted by the Egyptian gola. . . 133
Restoration of the Persian column 134
Hall of the palace at Susa. 135
Royal tombs at Naksh-i-Rustem. 135
Tomb of Xerxes at Naksh-i-Rustem. 136
Relief on the Palace of Darius at Persepolis. 137
Persian capital from Susa. (Louvre). 138

PHOENICIA AND CYPRUS. MEDITERRANEAN COLONIES

Hittite reliefs from Boghaz Keui. 139
Hittite relief 139
Hittite relief from Sakhchegozu. 140
Relief on a doorway. Boghaz Keui 140
Base of a column in the gateway of a Hittite palace. 141
Coin representing the Phoenician temple at Byblus 141
Lintel from the temple at Byblus. (Louvre). 142
Tomb at Amrit, or Marathus 142
Anthropomorphic sarcophagus. (Museum of Constantinople). 143
Phoenician sarcophagus. (Museum of Cadiz). 143
Phoenician sarcophagus from Cyprus. (Museum of New York). . . . 144
Phoenician capital. Cyprus 144
Phoenician priest. Sculpture from Cyprus 145
Silver cup in imitation of the Egyptian style. 145
A Cypriote merchant. (New York Museum). 146

Page

Canaanean sanctuary, or «high place», at Gezer. 146
Roman glass decorated with a view of the temple at Jerusalem. . . . 147
Plan of the Holy of Holies in the temple at Jerusalem 147
Bronze column in the temple at Jerusalem 147
The temple at Jerusalem as seen from the outside. 148
The so-called Tomb of the Judges. Jerusalem. 149
So-called Tomb of Absalom. Jerusalem. 149
Terra-cotta figures. Necropolis in Iviza. (Vives Collection). 150
Carthaginian terra-cotta figurine. Iviza 151
Carthaginian terra-cotta plaque. Iviza 151
Carthaginian terra-cotta mask. (Vives collection) 152
Terra-cotta bust. Iviza 152
Statue of an Iberian priestess. (Archaeological Museum of Madrid). . . 153
Iberian diadem found at Javea. (Archaeological Museum of Madrid). . . 154
Bulls' heads of bronze found in Mallorca 155
Carving from Balazote. (Archaeological Museum of Madrid). 156
The bulls of Guisando. Avila 157
Carnivorous animal called the Iberian lion of Baena. 157
Iberian bronze found at Despeñaperros 158

THE ART OF THE FAR-EAST

Wooden bridge in the highlands of India. Kashmir 159
Seringham. Stone construction imitating a wooden ceiling 160
Court of the Kailas, excavated from the rock. India. 161
Buddhist tope, or relic-shrine. Sanchi. India. 162
Vihara, or cell, in the Buddhist style of India. 163
Vihara set within the cloister of a Buddhist monastery. India. . . . 164
Buddhist relief. Amaravati. India 165
Corinthian capital of a Buddhist monument. India. 166
Buddhist art. Statue of Buddha. (Louvre). 167
Brahman temple of Seringham. India. 168
Portico of the temple of Seringham. India 169
Gopura at Conjeeveram. India 170
Entrance to the first court. Angkor-Vat 171
Tower and cloister of the temple at Angkor-Vat 172
Partial view of the portal of the temple of Angkor-Vat. 173
Evolution of Chinese art 174
Prehistoric Chinese tripod 174
Bas-relief of the horses of Tang. (University Museum.) Philadelphia. . . 175
Avenue of the dromedaries. Imperial tombs. Ming dynasty. Nanking. . . 175
Early Buddhist relief. China.. 176
Seated Buddha. Caves of Yun-Liang. China. 177
Procession of Buddhist monks. Caves of Lung-Men. China. 178
Buddhist head of Khotan. 178
Chinese portrait heads. Ming period. (Royal Ontario Museum). . . . 179
Portrait head of an empress. Ming period. (Royal Ontario Museum) . . 179
Terra-cotta musicians and dancers of the Tang period. 180
Terra-cotta horses dating from the period of the Tang dynasty 180
Tiger by Chen-Chu-Chung (Bristish Museum). 181

Page

Landscape. Ming period. 181
The seven pines. Tang period (New York Museum). 182
Instruction of Nui-Tsung (New York Museum). 183
Japanese chromotype by Hokusai 183
Japanese sword-guard 184

PRE-HELLENIC ART

Casemates or corridors in the walls of Tiryns. 185
Archaeological map of Greece 186
Plan of Troy. 188
The Lion Gate. Mycenae. 189
The agora and the excavated royal tombs. Mycenae. 190
Ornaments found in the royal tombs. Mycenae 191
Stela from the royal tombs. Mycenae. 191
Corridor and entrance of a burial chamber. Mycenae. 192
Entrance to a Mycenaean tomb. 192
Hall of a Mycenaean tomb 193
Remains of a pre-Hellenic tomb. Crete. 194
Cross-section and plan of the treasury of Atreus. 194
Plan of the acropolis, or fortress, of Tiryns. 195
Court of the palace at Phaestus. Crete. 196
Plan of the palace at Cnossus. Crete. 197
Cross-section showing stratification of the palace at Cnossus. 197
Plan of the Queen's Megaron in the palace at Cnossus. 198
Small gold amulets discovered at Cnossus 198
Fresco in the palace of Cnossus. 199
Miniature shrine for the worship of the pillar. 199
Megaron of the palace at Phaestus in Crete. 200
Restoration of the façade of a pre-Hellenic megaron. 200
Miniature terra-cotta houses. Cnossus 201
Priestess bearing a casket. Fresco at Tiryns. 201
Cup bearer. Fresco at Cnossus. Crete. 201
Fresco at Cnossus. Crete. 202
Sarcophagus of Hagia Triada. Crete. 202
Faïence figure of a pre-Hellenic priestess. 203
Painting on faïence from Cnossus. 203
Porcelain vase with relief design. Cnossus 204
Painted vase. Cnossus 204
The vase of the warriors (Museum of Athens). 205
Aegean vase (Museum of Candia). 205
Porcelain reliefs from Cnossus 206
Steatite vase representing the harvesters' return. 206
Gold votive offering found at Mycenae. 207
Engraved daggers from Mycenae. (Museum of Athens). 208

GREECE

Doric Greek temples at Paestum. 209
Sculpture of the femenine Greek deity. Crete. 210

Page

The primitive Greek Temple of Tiryns. 211
Pre-Hellenic megaron 212
Temple of Ilissus. 212
Temple of Assos. 212
Temple D, Selinus 213
Temple of Rammunte. 213
Temple of Juno. Olympia 213
Ruins of the original temple of Juno. Olympia. 213
Temple in antis. Treasury of the Athenians. 214
Elevation and plan of a hexastyle temple. Agrigentum 214
Archaic Doric temple of Corinth. 215
Classic Doric temple of Sunium 215
Interior of a temple with three naves. Paestum. 216
Wooden construction of the primitive Doric temple. 217
Roof of a classic Doric temple. 217
Scheme of the Doric order. 218
Terracotta cymatium 219
Central acroterium of Aegina 219
Stone cymatium of the temple of Hymera. (Museum of Palermo). . . . 220
Doric temple witth stucco coating. Agrigentum. 220
Scheme of the Ionic order 221
Early Ionic capital of Neandria. 222
Restoration of the temple of Ephesus. 222
Plan of the temple of Ephesus 223
Columns of the temple of Ephesus 223
Athletes of the type called the Archaic Apollo. 224
Archaic Apollo. Athens. 225
Statue of Chares from Miletus (British Museum). 225
Head of archaic Apollo. Thasos. 226
Primitive Greek sculpture (Museum of Candia). 226
Marble statuette. Olympia 226
The Hera of Samos (Louvre). 227
Votive offering of Nicandria. 227
Archaic girl (Acropolis of Athens) 227
Archaic Venus (Museum of Lyon). 228
Archaic Korê (Acropolis of Athens). 228
Archaic Korê (Acropolis of Athens). 229
Korê by Antenor (Acropolis of Athens). 229
The flying Victory of Archermus. Delos. 230
Flying Victory (Museum of Athens). 230
Chryophorus (Museum of Berlin) 231
Moschophorus (Museum of Athens). 231
Fragment of an archaic frieze. Crete. 232
Metopes of Selinus (Museum of Palermo). 232
Funerary amphor of the so-called Dipylon style. 233
Archaic head. Athens 234
Delphi. The stadium after excavation 235
Treasury of the city of Cnidus. Delphi 236
Archaic caryatid from the treasury of Siphnus. Delphi. 237
Archaic sphinx. Ex-voto of the city of Naxos. Delphi. 237

Page

Temple of Apollo. Delphi 238
Plan of the sacred enclosure. Olympia 239
Plan of the Temple of Jupiter. Olympia. 240
Fragment of sculpture from the Temple of Jupiter. Olympia. 240
The Apollo of the pediment. Olympia 241
Heads of figures from the temple at Olympia. 242
Ruins of the Temple of Aegina. 243
Restoration of the pediment of Aegina 243
Head of an archer from a pediment at Aegina (Museum of Munich). . . . 244
Wounded warrior of Aegina (Museum of Munich). 244
Minerva struggling with a giant (Acropolis of Athens). 245
Fragment of an archaic funeral stela (New York). 245
Funeral stela (Museum of Athens). 246
Relief from Thasos (Museum of Constantinople). 246
Funeral stela (Museum of Athens). 247
Archaic relief (Acropolis of Athens). 247
Ceres, Proserpina and Triptolemus. Eleusis. 248
Birth of Venus (Museum of the Thermae). Rome. 249
Lateral reliefs on the Ludovisi Throne. Rome. 249
Restoration of the group of the tyrannicides. 250
Archaic bronze (Museum of Athens). 251
Head of the Charioteer of Delphi. 251
Statue of the Charioteer of Delphi. 251
The Discobolus by Myron 252
Archaic Discobolus 252
Restored group of Minerva and Marsysas by Myron. 253
The Doryphorus of Polycleitus (Vatican). 254
Head of another copy of the Doryphorus (Museum of Naples). . . . 254
The Diadumenus of Polycleitus (Museum of Madrid). 255
Archaic Amazon (Museum of Vienna). 256
Amazon by Polycleitus (Museum of the Vatican). 256
Amazon by Phidias 257
Amazon by Cresilas. 257
Amazon by Phradmon 257
Amazon's head, by Cresilas. 258
Athlete's head, by Cresilas 258
Head of Juno, by Polycleitus (British Museum). 258
Coin from Argos with head of Juno, by Polycleitus 258
Painted sarcophagus by Clazomenae. 259
Painted tablet representing a warrior (Museum of Athens). 260
Mercury and the three goddesses. Ceramic decoration 261
The François Vase (Museum of Florence). 261
Archaic lion (Venetian Arsenal). 262
The Acropolis of Athens before 1885. 263
Plan of the Erechtheum. 264
Restoration of the Acropolis of Athens 265
The Lemnian Minerva, according to Amelung. 266
Head of Minerva Parthenos. Vienna. 267
Minerva Parthenos 267
Papyrus containing an account of the prosecution of Phidias. 268

Page

Portrait bust of Pericles. 269
East façade of the Parthenon. 270
West façade of the Parthenon 271
Statue of Hebe from one of the pediments of the Parthenon. 272
Head of one of the horses of Selene. Parthenon. 273
Statue of Iris from one of the pediments of the Parthenon. 273
Female head from one of the pediments of the Parthenon. 274
Panathenaic frieze. Parthenon 274
Panathenaic frieze. Parthenon 275
Group of goddesses. Parthenon frieze (Museum of Athens). 275
Coins from Olympia representing the Jupiter of Phidias. 276
The Jupiter of Otricoli (Museum of the Vatican). 276
Plan of the Propylaea of the Acropolis of Athens. 277
The Propylaea, Beulé Gate and Temple of Minerva Nike. 277
Temple of Minerva Nike (Acropolis of Athens). 278
Victory from the balustrade of the Temple of Minerva Nike. 279
General view of the Erechtheum as last restored. 280
Porch of the caryatids of the Erechtheum. 281
Capital of one of the angles of the Erechtheum. 282
Entrance to the Erechtheum. 282
Votive column. Delphi 283
One of the caryatids of the Erechtheum. 284
The Apollo of Cassel. 285
The Niobid of Subiaco (Museum of the Thermae). Rome. 286
Niobid discovered in Rome 286
Combat painted on an Etruscan sarcophagus. 287
Return of Ulysses. Relief from Giloi-Bassi 287
Greek vases discovered in Emporion. Spain. 288
Pelops and Hippodamia. Athenian vase of the 5th century B.C. 288
Cup representing Venus and the Swan 289
Torso of Neptune. Parthenon 290
Tombs of the Ceramicus. Athens 291
Restoration of the tholos of Epidaurus 292
Cross-section of the tholos of Epidaurus. 292
Marble panels from the colonnade of the tholos of Epidaurus. 293
Lysicrates' Lantern. Athens 293
Ruins of the Philippeum. Olympia 294
The Venus of Alcamenes. 294
Juno (Museum of the Vatican). 295
The Juno Ludovisi (Museum delle Terme). 296
Eirene and Plutus (Museum of Munich) 297
Head of Eirene (Museum of Munich). 297
The Cupid of Madhie (Museum of the Bardo). Tunis. 298
The Cupid of Centocelle (Museum of the Vatican). 298
The satyr of Praxiteles (Capitolium Museum). 299
Head and bust of the satyr of Praxiteles (Capitolium Museum). 299
Apollo Sauroctonus (The Louvre). 300
The Cnidian Venus (Vatican). 301
Head of the Cnidian Venus (Vatican). 301
Restoration of the Cnidian Venus of Praxiteles. 302

Page

The Mercury of Praxiteles. Olympia. 303
The Muses. Carved slabs from the temple of Mantinea 304
Eubuleus from Eleusis (Museum of Athens). 304
Torso of Psyche (Museum of Naples). 304
Head of the funeral statue from Herculaneum 305
Funeral satue (British Museum). 305
The Cnidian Ceres (British Museum). 306
Funeral portrait head (Museum delle Terme). 307
The Fanciulla of Anzio (Museum delle Terme). 307
The Apollo Castellani (British Museum). 308
The Apollo Pourtalés (British Museum). 308
The Apollo Belvedere (Vatican). 309
The Diana of Versailles (Louvre). 309
Renaissance bronze (Stroganoff Collection). Petrograd 310
Venus of Arles (Louvre). 310
The Venus of Milo (Louvre). 311
Scopas. Head of Meleager (Villa Medici). Rome. 312
Scopas. Head of an athlete (Museum of New York). 312
Scopas. Heads form the temple of Minerva Alea. 312
Statue of Mausolus (British Museum). 313
Niobe (Museum of Florence). 314
A Niobid (Vatican). 314
Alexander idealized (Museum of Vatican). 315
The child Alexander (British Museum). 315
The youth Alexander. Munich 315
The Azara Alexander (Louvre). 316
Hercules overcoming the stag. Palermo. 316
Seated Hercules Belvedere (Vatican Museum). 317
Jason (Louvre). 317
The Mars Ludovisi (Museum delle Terme). 318
The Apoxyomenus of Lysippus (Vatican). 319
Head of the Apoxyomenus (Vatican). 319
Statue of Agias by Lysippus. Delphi. 320
Ephebus of Tralles (Museum of Constantinople). 321
Stela from the Ceramicus (Museum of Athens). 321
Athenian stela (Monastery of Grotaferrata). 322
Stela of Demetria and Pamphila (Museum of Athens). 322
Sacrifice of Iphigenia (Museum of Naples). 323
The sacrifice of Iphigenia. Mosaic in Emporion. Spain. 324
The Aldobrandini wedding. Fresco from Ostia (Vatican Library). 324
The Battle of Issus. Pompeiian mosaic. Naples. 325
Head of Alexander. Mosaic in the Museum of Naples. 325
Mother and family. Villa Item. Pompeii. 326
Initiation into the Mysteries. Villa Item. Pompeii 327
Triangular capital from Eleusis. 329
Tower of the Winds. Athens. 330
Plan of Priene. The market quarter. 331
View of the excavations at Priene. 331
A street fountain. Priene. 332
Plan and reconstruction of a Greek house. 332

Page

Plan of the temple of Priene. 333
Entablature of the temple of Priene 333
Balcony of the upper floor of the basilica of Pergamum 334
Plan of the Library of Ephesus. 334
Restoration of the façade of the Library of Ephesus. 335
Gymnasium at Soluntum. 335
Greek theatre. Epidaurus. 336
Theatre of Dionysus at Athens. 337
Marble seat in the theatre at Athens. 338
Plan of the Odeum at Athens 338
Funeral urn. Athens. 339
Funeral stela. Athens 339
Tomb of Theron. Agrigentum 340
Plan of the temple of Miletus 340
Capital from the temple of Sardis 341
The Pharos of Alexandria. Relief in the cathedral of Pisa. 341
The Victory of Samothrace (Louvre). 342
The crouching Venus (Vatican). 343
Bust of Venus from near Madhia (Museum of Tunis). 344
Sleeping Fury (Museum delle Terme). Rome. 344
Old centaur and Cupid (Louvre). 345
Young centaur and old centaur from Hadrian's Villa. 345
The praying youth by Boëthus (Museum of Berlin). 346
Antioch, by Eutychides (Museum of the Vatican). 346
Plate ornamented with a relief representing Alexandria. 347
Allegorical group representing the Nile (Vatican). 347
Youthful runner taking a thorn from his foot. 348
Boy strangling a goose (Museum of the Vatican). 348
Boy with goose (Museum of Valencia). 348
Cupid and Psyche (Capitoline Museum). 349
Marsyas (Museum of Constantinople). 349
Portrait statue of Sophocles (Museum of the Lateran). 350
Head of Sophocles (Lateran). 350
Portrait of Demosthenes 351
Head of Demosthenes (Vatican). 351
Fisherman (Capitoline). 352
Aged shepherdess (Capitoline). 352
Aesop (Villa Albani). 352
Relief of a rural scene (Museum of Munich). 353
Hellenistic bronzes from Alexandria (Fouquet Collection). 354
Hellenistic bronzes found at Pompeii (Museum of Naples). 355
Cupid with a lyre and a pair of dancing dwarfs. 356
Alexandrian actor. Bronze (Museum of New York). 356
Group of the Gaul and his wife (Museum delle Terme). 357
Dying Gaul (Capitoline). 357
Heads of the Gauls reproduced in figures 576 and 577. 358
Giant's head from the altar of Pergamum. 359
Titan's head (Museum of Athens). 359
Laocoon Group (Vatican) 360
The Farnese Bull (Museum of Naples). 361

Page

Venus and Mars (Museum of Naples). 362
Medea (Museum of Naples). 362
Cupids dispensing wine (Museum of Naples). 363
Mosaic representing fishes, found at Emporion (Museum of Barcelona). . 363
Antiochus I and the Sun God (Nerud-Dagh). 364
Embroidered mantle (Museum of Athens). 365
Graeco-Roman vessels from the Treasure of Hildesheim. 365
Cameo of Vienna 366
Cameo of Petrograd. 366
Coin of Ptolemy II. 366
Tanagra figurines of terra-cotta (Museum of Madrid). 367
Head of Hipnos (British Museum). 368

ROME

Map of Etruria 369
Cinerary urn of Latium (Roman Forum). 370
Pit-tomb containing urn and funeral objects. 370
Prehistoric cemetery in the Roman Forum. 371
Branch of the Cloaca Maxima. Rome. 371
Walls at Norba. Latium. 372
Walls of the Latin acropolis of Aletrium. 373
Restoration of the acropolis of Aletrium. 373
Ruins of an early Latin temple. Gabii 374
Plan of the early temple of the Capitoline. 375
The Capitoline as rebuilt during the Roman Empire. 375
Etruscan tomb. Albano 376
Etruscan tomb covered by a mound of earth. Caere. 376
Chamber of the Columns. Etruscan tomb. Corneto. 377
Burial chamber of an Etruscan tomb. Corneto. 377
Etruscan sarcophagus of terra-cotta (Villa Giulia). Rome 378
Etruscan sarcophagi from Italy (Museum of Barcelona). 379
Etruscan sarcophagus (Museum of Palermo). 379
Etruscan jewelry (Villa Giulia). Rome. 380
Etruscan necklace (Villa Giulia). Rome. 380
Pottery called «buchero nero». Bologna. 381
Bronze Etruscan couch 381
Engraved Etruscan cist (Villa Giulia). 382
Etruscan mirror (Villa Giulia). Rome. 383
Restoration of the Etruscan temple at Faleria (Villa Giulia). 383
Etruscan gate. Perugia. 384
Temple of Cori. Latium. 385
Plan of the temple of Fortuna Virilis at Rome. 386
Temple of Fortuna Virilis at Rome. 386
Detail of the temple of Fortuna Virilis at Rome. 387
Podium of the temple at Palestrina. Latium. 388
Sarcophagus of Lucius Cornelius Scipio Barbatus (Vatican). 388
Temple of the Sybil. Tivoli. 389
Temple of Vesta. Rome. 389
Monument to Bibulus. Rome. 390

Page

Theatre of Marcellus. Rome. 390
Capitoline, Tabularium, and other temples. 391
Tabularium. Rome 391
Terra-cotta head from the decoration of an Etruscan temple. Rome. . . 392
Roman portrait bust of the Republican period (Vatican). 392
The wolf of the Capitol. 393
The Orator (Museum of Florence). 393
Portrait sculpture of Brutus (Capitoline Museum). 394
Portrait sculpture of an old man (Vatican). 394
Portraid head of Julius Caesar (British Museum). 395
The Diana of Pompeii 396
Group of Iphigenia and Orestes (Museum delle Terme). Rome. . . . 397
San Ildefonso Group (Museum of the Prado). 397
Window decoration. Basilica Aemilia (Roman Forum). 398
The Earth Goddess, Tellus (Uffizi Gallery). 399
Perseus and Andromeda (The Capitol). Rome. 400
Decorative reliefs found at Rome (Museum of Viena). 401
Frieze from the altar of Domitius Ahenobarbus (Louvre). 402
Frieze from the altar of Domitius Ahenobarbus (Louvre). 403
Suovetaurilia (Roman Forum). 403
Battle between Romans and Gauls (Monument of St. Rémy). . . . 404
Temple of Augustus at Ancyra. Galatia. 405
The Ara Pacis Augustae 406
Relief of the Ara Pacis (Museum delle Terme). Rome. 407
Relief of the Ara Pacis (Uffizi Gallery). 408
Fragments of the ornamentation of the Ara Pacis. Rome. 409
Frieze of the temple of Augustus. Tarragona. 410
Arch of Augustus. Rimini 410
Circus Maximus, between the Palatine and the Aventine. Rome. . . . 411
Tomb called the temple of the Deus Rediculus. Rome. 412
Pyramid of Caius Cestius. Rome. 413
Tomb of Caecilia Metella. Appian Way. Rome. 414
Tomb of Eurysaces. Fuora Porta Maggiore. Rome. 414
Columbarium. Rome. 414
Plan of early Roman house. 415
Early Roman house with atrium. 415
Roman house with atrium and Hellenistic court. 415
Decoration of the dining room of Bosco Reale (New York Museum). . . 416
Decoration of the House of Livia. Incrustation style 417
Architectural style of mural decoration. Pompeii. 418
Ornate style of decoration. Pompeii. 419
Fresco in the Golden House of Nero. Ornate style. 420
Woman playing the lyre. Bosco Reale. 420
Sacrifice of Pentheus. Pompeiian fresco. 421
Perseus and Andromeda. Pompeiian painting. 421
Relief personifying three cities (Louvre). 422
The young Octavian. Discovered at Ostia (Vatican). 423
Augustus as a young man. Discovered at Meroe (British Museum). . . 423
Portrait of Augustus with priest's mantle. Discovered near Rome. . . 424
Augustus as imperator (Vatican). 425

Page

Modesty (Vatican) 425
Tiberius (Vatican). 426
Gaius Caesar (New York). 426
The young Drusus (Lateran). 427
Agrippina the younger (Vatican). 427
Agrippina the elder (Vatican). 427
Antonia, wife of Drusus (British Museum). 428
Portrait of Minatia Polla (Museum delle Terme). 428
Pompeiian brasier (Museum of Naples). 429
Lamp. Pompeii 429
Rings of the Tiberius' galley (Museum delle Terme). Rome. 430
Candelabrum Barberini 430
Fountain from the garden of Maecenas. Rome. 431
Marble vases (Vatican). 431
Grand camée de France (Cabinet des Médailles). Paris. 432
The Flavian amphitheatre. Rome 433
Portrait of Vespasian 433
Lower arched corridor of the Colosseum. Rome. 434
The different orders of architecture in the Colosseum. Rome. 435
The Arch of Titus. Rome 436
Relief of the Arch of Titus. Rome 437
Relief of the Arch of Titus. Rome 438
Medallions on the Arch of Constantine. Rome. 438
Trajan's Arch. Beneventum. 439
Trajan's Arch. Beneventum. 440
Plan of Trajan's Forum. Rome. 441
Trajan's Column 442
Naval battle (Medinaceli Collection). Madrid. 443
Frieze of the temple of Vespasian. Capitol. Rome. 443
Fragment of the cornice of a temple of Trajan. Tarragona. 443
Hadrian dedicating the temple of Venus and Roma. 444
Hadrian's Arch. Athens 444
Views of the Hadrian's Villa. Tivoli. Rome 445
Hadrian's Villa. Ruins of the Temple of Antinous 446
Vaults on the Palatine. 446
Vault decoration in stucco 446
Façade of the Pantheon as it appears to day. Rome. 447
Restored interior of the Pantheon 448
Plan of the Pantheon 448
Doorway of the Pantheon in the sixteenth century 449
Temple of Antoninus and Faustina (Roman Forum). 450
Plan of the temple of the Sun. Rome. 450
Base of the temple of Neptune. Rome. 451
The Province of Hispania 451
Restoration of Hadrian's tomb. Rome 452
The Appian Way outside Rome. Restoration. 452
Base of the Column of Marcus Aurelius. Rome. 453
Relief representing the triumph of Marcus Aurelius. 453
Portrait statue of Nerva. Vatican 454
Equestrian statue of Marcus Aurelius. Rome 454

Page

Bust of Antinous (Vatican). 455
Antinous (Villa Albani). Rome. 455
Tusnelda, the barbarian prisoner. Florence. 456
Portrait statue of a Vestal (Museum delle Terme). Rome. 456
Julia, the daughter of Titus (Vatican). 457
Portrait of a Roman lady. Capitol. 457
Spanish-Roman lady (Museum of Madrid). 458
Funeral group of husband and wife (Vatican). 458
Head of an old man (Museum of New York). 459
Head of a man (Museum of New York). 459
Portrait of a Roman of Trajan's time (Vatican). 459
A Roman of Hadrian's time (Museum of New York). 459
A Venetian (Museum of Aquileia). 460
A German (British Museum). 460
A Greek (Museum of Athens). 460
A Spaniard (Museum of Madrid). 461
A Dacian (Museum of Vienna). 461
Dance of the warriors (Museum of the Vatican). 461
Relief of roses (Lateran Museum). 462
Relief from Trajan's Forum (Lateran Museum). 463
Relief from the principles of second century (Lateran Museum). . . . 463
Grape-vine frieze (Lateran Museum). 464
Frieze of the Mesopotamian fortress at M'schatta. 464
Miniature in a manuscript of Virgil (Vatican Library). 465
Arch called Janus Quadrifons. Rome 466
Roman bridge over the Guadiana. Merida. Spain 467
Fragment of map showing the roads of the Empire. 468
The bridge of Alcantara near Caceres. 469
Temple at the bridge of Alcantara. 469
Aqueduct of the Valley of Guadalerzas 470
Aqueduct at Segovia. 470
Acueducto de los Milagros. Mérida. 470
The aqueduct known as Puente del Diablo. Tarragona. 471
The caños de Carmona. Seville 471
The Porta Nigra. Treves 472
Old Roman towers of the city gate of Barcelona. 472
Ruins of the Forum. Pompeii. 473
Public fountain in the Forum. Pompeii 473
Columns of a Roman temple. Barcelona. 474
Roman amphitheatre. Nimes. 475
Interior of the amphitheatre. Pompeii. 475
Amphitheatre at Italica. 476
Interior passageways in the amphitheatre at Italica. 476
Theatre at Thougga. Northern Africa. 476
Roman theatre. Merida 477
Roman theatre at Ronda la Vieja. Granada. 477
Roman theatre at Sagunto. Valencia. 477
The praetorium. Lambessa. Northern Africa. 478
The trophies of Trajan. Roumania. 479
Germanic warrior (Museum of Cilli). Hungary. 479

Page

Monument at Igel 480
Tutor and pupils. Grave-relief from Neumagen. 481
Noble lady having her hair dressed (Museum of Treves). 481
Payment of a debt. Neumagen relief (Museum of Treves). 482
Stela of Cantius Secundus (Museum of Gratz). 483
Stela of L. Aemilius (Museum of Madrid). 483
General view of Baalbec. Syria. 484
Plan of Baalbec. Syria 484
Columns of the temple of Jupiter. Baalbec 485
Nabataean tomb. Petra. 486
The Treasury of Salomon. Petra. 486
El Deir. Petra 487
Funeral stela discovered at Palmyra (Museum of New York). . . . 487
Roman tomb in Palestine. 488
Tomb of Dschel Geval. Syria 488
Relief of Cyrene and Libya (British Museum). 489
Diana of Ephesus 489
Winged Minerva. Ostia. 490
Mithras sacrificing a bull (Vatican Museum). 490
View and detail of the Arcus Argentariorum. Rome. 491
Baths of Caracalla. Rome 492
Baths of Caracalla. Restoration of their structure. 492
House of the Vestals with the Basilica of Maxentius. Rome. 493
Plan of the Basilica of Maxentius. Rome. 493
Restoration of the Palace of Diocletian at Spalato. 494
The Mausoleum of Diocletian in the palace at Spalato. 494
Arch of Constantine. Rome. 495
Reliefs on the Arch of Constantine. Roma 496
Victory figures on the socles of the Arch of Constantine. Rome. . . . 497
Sarcophagus of St. Costanza (Vatican Museum). 498
Sarcophagus with the Three Graces and Four Seasons 498
Bronze portrait of Trebonianus Gallus (New York). 499
Cameo of Maximus. 499
Portraits of Philip the Arab and Pupenius (Museum delle Terme). . . 500
Portrait head of Constantine (Museum of the Capitol) 500
Mosaic representing the triumph of Bacchus. 501
Charioteer leaving the circus (Museum of the Bardo). Tunis. 501
Medusa. Roman Mosaic. Tarragona. 502

PRE-COLUMBIAN AMERICA

Ruins of the temple of the Inca. Cuzco. Peru. 503
Mexican picture manuscript. 504
Archaeological map of Mexico and Yucatan. 504
Mexican hieroglyphics. Day-signs 505
Cruciform symbols from the Mexican picture-manuscripts. 505
A human sacrifice (Mexican picture-manuscript). 505
Temples from Mexican picture-manuscripts. 506
Ruins of the Sun Temple. Palenque. 507
Palace and one of the temples at Palenque. 508

	Page
Terra-cotta model of a temple.	508
View of the Casa del Adivino. Uxmal. Yucatan.	509
Plan of the Palace at Zayi.	509
Plan of the «Nunnery». Uxmal.	509
One of the buildings of the Group of the Columns. Mitta.	510
Column of one of the palaces. Mitta.	511
Plan of the Group of the Columns. Mitta	511
The House of the Governor. Uxmal.	512
Mosaic on the façade of the House of the Governor. Uxmal.	513
Corner of the House of the Governor. Uxmal	513
Façade decoration of the House of the Governor. Uxmal.	513
Reliefs on the teocalli of Xochicalco.	514
Terrace of the teocalli of Xochicalco.	514
Pre-Columbian Maya stela (Museum of Harvard University).	515
Mexican stela (Kircher Museum). Rome.	515
Statue of a warrior (National Museum of Mexico)	516
Maya altar at Tikal.	516
Tablet of the Cross from Palenque. Mexico.	517
Sacrificial stone (Museum of Mexico).	518
Calendar stone (Museum of Mexico).	518
Sculpture from the ruins of Copan. Honduras.	519
Maya figure from Yucatan (National Museum of Mexico).	519
Turtle altar. Quirigua	520
Hieroglyphic stela. Quirigua	520
The Maize God. Piedras Negras. Guatemala.	520
Mexican pottery	521
Vases representing human heads.	522
Vases representing the effect of disease.	522
Peruvian vase decorated with geometrical pattern	523
Peruvian vase with floral decoration.	523
Typical Peruvian pottery decoration.	523
Pre-Inca vases from Pachacamac. Peru.	524
The Astronomical Congress at Copan, held Sept. 2nd, A.D. 503. (Spinden).	525

LIST OF PLATES

		Page
PLATE I.	Ceremonial dance-mask of the Indians of British Columbia.	11
» II.	Sculpture from Easter Island. Pacific Ocean (British Museum).	15
» III.	Male bison. — Female bison leaping. Cave at Altamira.	21
» IV.	Fresco at Cogul. Lérida. — Fresco at Alpera. Almería.	25
» V.	Doorway of a mastaba (British Museum).	45
» VI.	Group of Mencheres and his wife, carved from a dark stone.	51
» VII.	Court of the temple of Rameses III at Karnak. — Court of Rameses II at the temple of Luxor. Thebes.	63
» VIII.	Temple of Karnak. — Hypostyle hall. Windows with lattice-work.	69
» IX.	Group of Amenophis II and the cow, Hathor (Cairo Museum).	73
» X.	Papyrus, Book of the Dead: Funeral offerings. The judgment of the soul.	75
» XI.	The kiosk of Kartassi, in Nubia.	87
» XII.	Ptolemy Philaretes crowned Pharaoh of the Upper and Lower Egypt.	91
» XIII.	Upper portion of the stela containing the Code of Khammurabi (Louvre).	103
» XIV.	Stela of Mardukpallidin (Berlin Museum).	107
» XV.	Relief and altar of Assur-nazir-pal III, discovered at Kuyunjik.	119
» XVI.	Bronze reliefs from the gates of the palace at Balawat.	123
» XVII.	Frieze representing a group of Persian dignitaries bearing presents to the king (reproduced in part). Stairway of the Palace of Xerxes.	133
» XVIII.	Frieze of glazed tiles from Susa, called the Archers Frieze (Louvre).	137
» XIX.	Palace gates at Boghaz Keui (Puchstein).	141
» XX.	Lycian tomb, counterfeiting wooden construction (British Museum).	145
» XXI.	Phoenician funerary mask from the necropolis of Iviza (Museum of Cau Ferrat). Sitges.	151
» XXII.	Bust of Iberian priestess called the Lady of Elche (Louvre).	157
» XXIII.	ANGKOR-VAT. Monumental avenue and entrance to the temple. The great stairway of the temple.	169
» XXIV.	The sacred tree of the Han. Rubbing of stone relief. China.	173
» XXV.	Architecture and Sculpture in the Far-East.	177
» XXVI.	One of the Lo-Han, or sixteen companions of Buddha.	179
» XXVII.	Chinese and Japanese art. Painting down to the fifteenth century.	183
» XXVIII.	Column from the entrance to the Treasury of Atreus (British Museum).	193
» XXIX.	Ivory and gold statuette of a Cretan priestess (Boston).	203
» XXX.	PRE-HELLENIC GOLD WORK. — *A.* Gold cups from Mycenae. — *B.* Tiara from Mycenae. — *C.* Gold cups from Vaphio.	207
» XXXI.	Colossal statue of enthroned goddess.	225
» XXXII.	Bronze statuette incrusted with diamonds and precious metals.	231

		Page
PLATE XXXIII. .	Head of Myron's Discobolus.	253
» XXXIV. .	Earlier works of Phidias. The Apollo of the Tiber and the Minerva of Dresden.	267
» XXXV. .	1. A reproduction in the exact size and of the same materials of the Parthenon of Athens at Nasville. Tenn. U. S. A. — A restoration of the Parthenon of Athens with the Minerva of Phidias at the Metropolitan Museum in New York.	273
» XXXVI. .	Torso of Theseus. East pediment. Parthenon. — Torso from the angle of the west pediment (British Museum).	277
» XXXVII .	Exploit of Hercules. Restoration of a fresco by Mikon.	285
» XXXVIII.	Attic vase of the last third of the 5th century B.C. (Museum of Athens). .	289
» XXXIX. .	Restoration of the Mausoleum of Halicarnassus (British Museum). .	315
» XL. . .	ATHENIAN FUNERAL STELAE. — A and C, are of the type representing the deceased distributing her jewels. — B and D, portray the last farewells of the loved ones (Museum of Athens).	319
» XLI. . .	NECROPOLIS OF SIDON. Sarcophagus of the mourning women. — Te so-called Sarcophagus of Alexander (Museum of Constantinople). . . .	323
» XLII . .	Aldobrandini wedding (fragment). Group of Venus and the wife (Vatican Museum).	327
» XLIII . .	Statues of Venus with praxitelian influence	345
» XLIV . .	Hellenistic portrait sculptures.	353
» XLV. . .	HELLENISTIC ART. Old woman going to the market (New York Museum).	357
» XLVI . .	A. Restoration of the Acropolis of Pergamum, with Altar of Jupiter in the foreground. — B. Relief from the Altar of Pergamum. Minerva battling with Alcyoneus (Museum of Berlin).	361
» XLVII. .	The Portland Vase (British Museum).	365
» XLVIII. .	Apulian vase of the third century B.C.	367
» XLIX. . .	ROME. — Valley of the Forum viewed from the Capitoline. To the left, the Esquiline, and to the right, the Palatine, with the Velia in the background.	373
» L. . . .	Etruscan chariot discovered in Monteleone (Museum of New York). .	383
» LI. . . .	ROMAN MONUMENTS IN PROVENCE. — A. Arch of Tiberius at Orange. — B. Temple of Augustus and Roma, known as the Maison Carrée, at Nimes.	411
» LII . . .	Examples of the fourth, or *Intricate style*. Pompeii.	421
» LIII. . .	Trajan's Column.	443
» LIV. . .	Door of the Pantheon (restoration). Rome.	449
» LV. . . .	Portrait group of mother and daughter (Chatsworth Collection). . .	459
» LVI. . .	RUINS OF TIMGAD. Roman Africa. — A. General view of the city from the theatre. — B. Trajan's Arch at the entrance to the Forum	473
» LVII. . .	Roman theatre. Pompeii. Restoration of a Roman theatre. . . .	479
» LVIII. .	Roman portraits found in Egypt.	489
» LIX. . .	The Queen (so-called). Stela at Quirigua. Guatemala.	515
» LX. . .	Mexican feather-mosaic (Museum of Vienna). — Specimens of Peruvian feather-mosaic (Ethnological Museum at Berlin).	523
» LXI. . .	Temple of Quetzalcoatl (the feathered serpent). Teotihuacan . . .	523